



STATE NON-PROFIT ENTERPRISE «TESTING BOARD FOR PROFESSIONAL
COMPETENCE ASSESSMENT OF HIGHER EDUCATION TRAINEES IN
MEDICINE AND PHARMACY AT THE MINISTRY OF PUBLIC HEALTH OF
UKRAINE»

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Variant 05

TEST ITEMS
FOR THE UNIFIED STATE QUALIFICATION EXAM
STAGE 2

INTEGRATED TEST EXAM
KROK 2

MEDICINE

1. A 42-year-old patient has been hospitalized into the trauma department. X-ray reveals a pelvic fracture. Objectively, unassisted urination is not possible, urethrorrhagia is observed. Palpation detects an enlarged bladder and a painful swelling in the perineum. What is the most likely diagnosis in this case?

- A. Urethral trauma
- B. Acute kidney failure
- C. Bladder trauma
- D. Prostate cancer
- E. Perineal hematoma

2. At a maternity hospital, the age structure of the mothers who gave birth to overweight children was studied. What graphical method should be used to visualize the obtained data?

- A. Radial diagram
- B. Histogram
- C. Pie chart
- D. Bar chart
- E. Line chart

3. A 53-year-old woman complains of pain in the right subcostal region that radiates into the right shoulder blade, shoulder, and right side of the neck. The pain significantly intensifies after eating fatty and fried foods. She has a bitter taste in her mouth. Objectively, sharp pain and mild muscle tension are observed in the right hypochondrium. Ortner, Murphy, and Mussay-Georgievsky signs are positive. Blood test results: leukocytes — $9.3 \cdot 10^9/L$, ESR — 27 mm/hour, bilirubin — 18.3 $\mu\text{mol/L}$, urea — 5.3 mmol/L , creatinine — 86 $\mu\text{mol/L}$. What is the most likely diagnosis in this case?

- A. Acute appendicitis
- B. Acute pancreatitis
- C. Acute cholecystitis
- D. Intestinal obstruction
- E. Peptic ulcer disease of the stomach

4. A 6-year-old child complains of an unsteady gait, limb tremor, and an increased body temperature. According to the patient's medical history, the child has been ill with chickenpox for the past 4 days. Objectively, the child has nystagmus and dysarthria. What complication has developed in the child?

- A. Polyneuropathy
- B. Encephalitis
- C. Meningitis
- D. Brain abscess
- E. Epilepsy

5. A 16-year-old girl complains of heavy bleeding observed for 4 days after a two month menstruation delay, irregular menstrual cycle, and opsomenorrhea. According to the patient's medical history, her menarche occurred at the age of 15. What is the most likely diagnosis in this case?

- A. Cervical polyp
- B. Juvenile uterine bleeding
- C. Subepithelial cervical endometriosis
- D. Cancer of the body of the uterus
- E. Acute leukemia

6. During a medical examination, a 19-year-old girl presents with a systolic tremor in the II intercostal space to the left of the sternum, expansion of the borders of the heart, accent of the second heart sound over the pulmonary artery, and a coarse and extended systolic murmur in the II intercostal space to the left of the sternum, which transitions to diastole and weakens during an inhale. Heart rate — 80/min., blood pressure — 120/50 mm Hg. What is the most likely diagnosis in this case?

- A. Coarctation of the aorta
- B. Pulmonary artery stenosis
- C. Patent ductus arteriosus
- D. Ventricular septal defect
- E. Atrial septal defect

7. Examination of a 5-year-old child detected round red inflammatory spots with peeling surface on the skin of the thigh. The spots have clear borders and are prone to peripheral growth. On their periphery, there are nodules and vesicles. There are small, mildly inflamed spots with peeling surface on the child's scalp. Within the foci, the hair is broken off at the height of 6–8 mm. During examination, a green glow can be observed in the light of a fluorescent lamp. What is the most likely diagnosis in this case?

- A. Inguinal epidermophytosis
- B. Microsporia
- C. Rubromycosis
- D. Tinea versicolor
- E. Trichophytia

8. A child was born from the first pregnancy, accompanied by gestosis of its first and second half. The delivery was via a caesarean section. Apgar score — 6 points. The baby's weight — 3000 g. The baby was suckling actively, no regurgitation. Two weeks later, the baby developed projectile vomiting with curdled milk in the vomitus that exceeded in volume the amount of baby's meals. The baby has become lethargic, is poorly gaining weight, the amount of urine and feces has decreased. What is the most likely diagnosis in this case?

- A. Intestinal obstruction
- B. Hirschsprung's disease
- C. Pylorospasm
- D. Pyloric stenosis
- E. Adrenogenital syndrome

9. An 18-year-old patient complains of pain in her lower abdomen, a fever of 37.5°C, a significant amount of mucopurulent discharge

being produced from her genital tract, and burning pain during urination. Mirror examination and vaginal examination reveal an infiltrated urethra and hyperemic and eroded cervix. The uterus is painful to palpation, the appendages are painful and thickened, the fornices are free. Bacterioscopic testing of the discharge detects diplococci. What is the most likely diagnosis in this case?

- A. Chlamydia
- B. Trichomoniasis
- C. Syphilis
- D. Candidiasis
- E. Acute gonorrhea

10. A 60-year-old patient suddenly developed dyspnea on the third day after a venectomy due to thrombophlebitis of the subcutaneous veins. Her skin first became markedly cyanotic and then ash-colored. Marked psychomotor agitation, tachypnea, and retrosternal pain are observed. What complication of the postoperative period has occurred in the patient?

- A. Bleeding
- B. Valvular pneumothorax
- C. Hypostatic pneumonia
- D. Myocardial infarction
- E. Pulmonary thromboembolism

11. A 25-year-old patient complains of general weakness, decreased appetite, feeling of heaviness and pain in the right hypochondrium, nausea, and dark urine. According to the patient's medical history, the patient was undergoing outpatient treatment for an acute respiratory viral infection for 3 days. Objectively, icteric sclerae, vesicular respiration, and rhythmic heart sounds are observed. The abdomen is soft and painful in the right hypochondrium. Hepatomegaly is observed. What is the most likely diagnosis in this case?

- A. Viral hepatitis A
- B. Pseudotuberculosis
- C. Influenza
- D. Leptospirosis
- E. Calculous cholecystitis

12. A 14-year-old patient complains of rhinitis with mucous discharge, edema of the face and eyelids, scleritis, and lacrimation. Objectively, the patient presents with hyperemia of the arches, hypertrophy of the follicles in the posterior pharyngeal wall, and conjunctivitis with formation of dense films. Body temperature — 39.5°C. What is the most likely diagnosis in this case?

- A. Adenovirus infection
- B. Influenza
- C. Herpes infection
- D. Parainfluenza
- E. Enterovirus infection

13. A 28-year-old patient with acute gastrointestinal bleeding of the III degree was transfused with 1000 mL of preserved packed erythrocytes of the same group. What must be used during the hemotransfusion to prevent citrate intoxication?

- A. Lithium chloride
- B. Calcium chloride
- C. Magnesium sulfate
- D. Sodium chloride
- E. Potassium gluconate

14. A 36-year-old woman complains of pain in her joints and muscles, loss of appetite, constipations, rapid fatigability, and a subfebrile body temperature. Objectively, she has dysphagia, symmetrical arthritis, skin thickening on her hands and feet, atrophy, small ulcers on her finger pads, Raynaud's syndrome, telangiectasia. What is the most likely diagnosis in this case?

- A. Syphilis
- B. Dermatomyositis
- C. Rheumatoid arthritis
- D. Systemic scleroderma
- E. Systemic lupus erythematosus

15. A 64-year-old man complains of the absence of urination during the last 12 hours. Objectively, a painful mass is palpable above the pubis, the upper edge of the mass reaches the navel. Rectal examination detects an enlarged prostate gland. The prostate is painless, lumpy and has a stone-like density. Blood levels of prostate-specific antigen are 24.2 ng/mL. What is the cause of the acute urinary retention in this case?

- A. Chronic proctitis
- B. Benign prostatic hyperplasia
- C. Epididymo-orchitis
- D. Acute prostatitis
- E. Prostate cancer

16. A 34-year-old woman came to a doctor with complaints of muscle weakness, thirst, increased urination at night, paresthesias, and seizure attacks. Objectively, her general condition is satisfactory, her face and legs are doughy, her pulse is 80/min., her blood pressure is 200/110 mm Hg, the second heart sound is accentuated over the aorta. Blood test shows K^+ levels of 3.1 mmol/L and Na^+ levels of 165 mmol/L. ECG shows inversion of T waves and depression of S-T segments. Ultrasound detects hyperplasia of the right adrenal gland. What is the most likely diagnosis in this case?

- A. Pheochromocytoma
- B. Essential hypertension
- C. Hypoparathyroidism
- D. Glucocorticoma
- E. Primary hyperaldosteronism

17. A newborn boy, born at 38 weeks of gestation with the weight of 2200 g, presents with a ventricular septal defect, cataracts in both eyes, and sensorineural deafness. At the term of 12 weeks, the mother of the boy had a case of an influenza-like disease accompanied by a rash. What is the most likely diagnosis in this case?

- A. Toxoplasmosis
- B. Cytomegalovirus infection
- C. Congenital varicella syndrome
- D. Congenital rubella syndrome
- E. Congenital listeriosis

18. A 35-year-old man complains of cough and shortness of breath during physical exertion. This health condition has been observed for the past 4 years. According to the patient's history, the patient has been working at a foundry for the last 14 years, where the concentration of quartz dust in the air of the workshop was 4 times higher than the maximum permissible concentration. Auscultation detected weakened respiration. Chest X-ray revealed emphysema and fine macular shadows in all lung fields. What is the most likely diagnosis in this case?

- A. Chronic bronchitis
- B. COPD
- C. Asbestosis
- D. Pulmonary tuberculosis
- E. Silicosis

19. A 20-year-old woman complains of a fever of 39°C, headache in the frontal region, pain in the eyes, photosensitivity, muscle pain, and dry cough. According to the patient's medical history, she became acutely ill the day before. Objectively, her condition is severe, her face is hyperemic, her eyes are shiny, with injected sclerae. Pulse — 96/min., rhythmic. Heart sounds are muffled. Scattered dry crackles can be heard in the lungs. The oropharyngeal mucosa is hyperemic, granular, with dilated vessels. There are no meningeal symptoms. Complete blood count: leukocytes — $3 \cdot 10^9/L$, eosinophils — 1%, band neutrophils — 6%, segmented neutrophils — 51%, lymphocytes — 35%, monocytes — 7%. What is the most likely diagnosis in this case?

- A. Meningococcal infection †
- B. Measles
- C. Influenza †
- D. Pneumonia †
- E. Epidemic typhus

20. An 80-year-old patient complains of sharp pain in the abdominal cavity, abdominal distension, and delayed bowel movements and passing of gas. The patient has a history of atrial fibrillation. Objectively, no peristalsis occurs. Percussion produces a tympanic sound in all segments. Rectal examination detects an empty rectal ampulla, traces of

raspberry jelly-colored intestinal contents remain on the glove. What is the most likely diagnosis in this case?

- A. Thrombosis of the mesenteric vasculature, intestinal obstruction
- B. Nonspecific ulcerative colitis, toxic dilatation of the large intestine
- C. Rectal cancer, intestinal bleeding
- D. Diverticular disease of the large intestine with perforation
- E. Crohn's disease, peritonitis

21. A 40-year-old man complains of a rash all over his body and slight itching. According to the patient's medical history, he has been ill for 3 months and associates his rash with a neuropsychic trauma. Objectively, he has multiple pink papules covered with silvery scales on the skin of his torso, scalp, and extensor surfaces of the limbs. What is the most likely diagnosis in this case?

- A. Lichen ruber planus
- B. Pityriasis rosea Gibert †
- C. Disseminated psoriasis
- D. Seborrheic dermatitis
- E. Papular syphilide †

22. A 36-year-old patient complains of dyspnea attacks with predominantly difficult exhalation. The attacks occur up to 2–3 times a day and can be relieved by inhalations of β_2 -adrenergic agonists. This condition lasts for 10 years already. Objectively, the chest is expanded, percussion detects a bandbox resonance over the lungs, auscultation detects harsh respiration with a prolonged exhalation. Laboratory analysis of sputum detects numerous eosinophils, Charcot-Leyden crystals, and Curschmann spirals. What is the most likely diagnosis in this case?

- A. Cardiac asthma
- B. Spontaneous pneumothorax
- C. Bronchial asthma
- D. Lung cancer †
- E. Chronic obstructive bronchitis

23. A 20-year-old woman complains of productive cough with expectoration of sputum and a fever of 38°C. According to the patient's medical history, the disease onset was acute and occurred 5 days ago after recovery from a case of an acute respiratory viral infection. Objectively, respiratory rate — 26/min. Percussion produces a dull sound in the lower segments of the lungs on the right. Auscultation detects weakened respiration in this area, with wet fine vesicular crackles. Heart rate — 110/min. What is the most likely diagnosis in this case?

- A. Tuberculosis
- B. Bronchial asthma
- C. Acute bronchitis
- D. Pyopneumothorax
- E. Pneumonia

24. Three days ago a 29-year-old patient developed throbbing pain in the rectum, increased body temperature, and general weakness. Palpation detected local soreness in the anal region. Digital examination of the rectum revealed a painful infiltrate that reached no higher than the pectinate line. What is the most likely diagnosis in this case?

- A. Acute hemorrhoids
- B. Acute anal fissure
- C. Acute paraproctitis
- D. Rectal tumor
- E. Acute prostatitis

25. A 19-year-old patient developed persistent macrohematuria, dyspnea, and hemoptysis after a case of acute respiratory viral infection. Chest X-ray shows signs of bilateral disseminated lung damage. Within 2 weeks, the patient's condition sharply deteriorated, creatinine levels increased to 327 $\mu\text{mol/L}$. What is the most likely diagnosis in this case?

- A. Goodpasture syndrome
- B. Hemorrhagic vasculitis
- C. Acute glomerulonephritis
- D. Systemic lupus erythematosus
- E. Wegener's granulomatosis

26. A 28-year-old woman at 36 weeks of her pregnancy complains of headache, nausea, vomiting, and pain in the right hypochondrium. Objectively, the following is observed: skin pallor, jaundice of the mucosa, the blood pressure of 160/100 mm Hg on both hands, edema of the legs and anterior abdominal wall, hemorrhages at the injection sites. Palpation detects sharp pain in the epigastric region and an enlarged liver. Blood test results: elevated ALT and AST levels, thrombocytopenia, hemoglobin — 85 g/L, hyperbilirubinemia. What complication has developed in the pregnant woman?

- A. Amniotic fluid embolism
- B. HELLP syndrome
- C. Eclampsia
- D. Liver rupture
- E. Disseminated intravascular coagulation syndrome

27. A 59-year-old woman complains of general weakness, rapid fatigability, paresthesias in the fingers and toes, and a fever of 37.5°C. Objectively, her sclerae are subicteric, the liver protrudes 1 cm from under the costal arch. Blood test results: erythrocytes — $2.5 \cdot 10^{12}/\text{L}$, hemoglobin — 90 g/L, color index — 1.1, leukocytes — $2.5 \cdot 10^9/\text{L}$, platelets — $152 \cdot 10^9/\text{L}$, reticulocytes

— 0.6%. Bilirubin — 38 $\mu\text{mol/L}$, with the predominance of indirect bilirubin. The patient's myelogram shows megaloblastic type of hematopoiesis. What is the most likely diagnosis in this case?

- A. Leptospirosis
- B. B_{12} deficient anemia
- C. Acquired hemolytic anemia
- D. Iron deficiency anemia
- E. Viral hepatitis A

28. A 2-year-old child suddenly developed a cough, stridorous breathing, an urge to vomit, and cyanosis after playing with small fragments of toy mosaics. What can be suspected first in this case?

- A. Acute laryngitis
- B. Foreign body aspiration
- C. Pertussis
- D. Acute laryngotracheitis
- E. Pneumonia

29. A 2-year-old child has abdominal distension and constipations. According to the patient's medical history, these symptoms first appeared at the age of nine months. Irrigography detects a narrowed area in the distal segments of the large intestine with a funnel-like transition into a suprastenotic expansion. What is the most likely diagnosis in this case?

- A. Crohn's disease
- B. Hirschsprung's disease
- C. Meckel's diverticulum
- D. Dolichosigma
- E. Intestinal duplication

30. A patient with a transmural myocardial infarction presented with a blood pressure decrease to 80/60 mm Hg, atrial fibrillation and right bundle branch block during the acute period of the disease. On the tenth day after the onset of the disease, the presence of QS complexes with ST segment elevation was noted in the ECG. At the same time, the patient developed signs of pericarditis, polyarthritides, and pleurisy. What complication of myocardial infarction has occurred in the patient?

- A. Pulmonary thromboembolism
- B. Left ventricular aneurysm
- C. Dressler syndrome
- D. Complete atrioventricular block
- E. Cardiogenic shock

31. A 59-year-old patient came to a women's clinic with complaints of bloody discharge from her genital tract. According to the patient's medical history, her postmenopause period lasts for 12 years already. Vaginal examination shows that the external genitalia have signs of age-related involution, the cervix is not eroded, and a small amount of hemorrhagic discharge is being produced from the cervical canal. The uterus is of

normal size, the appendages are not palpable. The fornices are deep and painless. What additional tests should be conducted in this case to clarify the diagnosis?

- A. Puncture of the abdominal cavity through the posterior fornix
- B. Culdoscopy
- C. Separate diagnostic curettage
- D. Extended colposcopy
- E. Laparoscopy

32. During enrolling children into a school, a doctor needs to use an express test to assess the functional readiness of a child for admission into a school and systematic studying. What test is used for this purpose?

- A. Wechsler test
- B. Dot cancellation test (Bourdon-Wiersma test)
- C. Kern-Jirasek test
- D. Academic cognitive assessment
- E. Eysenck test

33. A 24-year-old man complains of pain in the epigastrium that occurs 1–1.5 hours after eating, night pain, and frequent vomiting that brings relief. According to the patient's medical history, he abuses alcohol and is a heavy smoker. Objectively, the tongue is clean. Superficial palpation of the abdomen detects pain on the right above the navel. A fecal occult blood test is positive. What is the most likely diagnosis in this case?

- A. Peptic ulcer disease
- B. Chronic enteritis
- C. Chronic cholecystitis
- D. Chronic colitis
- E. Chronic gastritis

34. After the introduction of semolina into the diet of a 6-month-old child, the child's stools became copious, foamy, and dough-like. Despite having a good appetite, the child started losing weight, the abdomen became distended and the limbs became thin. What is the most likely diagnosis in this case?

- A. Coeliac disease
- B. Galactosemia
- C. Phenylketonuria
- D. Fructosemia
- E. Mucoviscidosis

35. After giving birth, a 25-year-old woman developed increased weakness in her legs and unsteady gait. According to the patient's medical history, she has been suffering from this condition for 6 years already. Every autumn, she notes a deterioration of her condition. Objectively, the woman is euphoric and exhibits a reduced critical attitude towards her condition. She has horizontal nystagmus, high tendon reflexes, foot clonus, pathological foot reflexes, no abdominal reflexes, ataxia during the Romberg test,

and intentional tremor and missing during coordination tests. Temporal pallor of the optic discs is observed on the eye fundus. What is the most likely diagnosis in this case?

- A. Amyotrophic lateral sclerosis
- B. Multiple sclerosis
- C. Cerebral infarction
- D. Myasthenia gravis
- E. Acute disseminated encephalomyelitis

36. A 26-year-old man complains of a rash on his face, itching, feeling of heat, and pain. According to the patient's medical history, this condition has been lasting for over two years. Objectively, the skin of the face in the area of the chin has infiltrated bright red areas, covered in pustules and scabs, with numerous erosions. Papulo-pustular elements are located on the periphery. What is the most likely diagnosis in this case?

- A. Eczema
- B. Acne vulgaris
- C. Scabies
- D. Sycosis
- E. Contact dermatitis

37. A 45-year-old patient complains of delayed passage of food, a bursting sensation behind the sternum, and vomiting with undigested food. Artificial contrasting of the esophagus with a barium mixture reveals stable conical narrowing of the supradiaphragmatic, subdiaphragmatic, and diaphragmatic segments of the esophagus with clear even contours. Above, along all other segments, marked diffuse widening of the esophagus is observed, as well as its elongation with the formation of bends. The gastric bubble is absent. What is the most likely diagnosis in this case?

- A. Esophagitis
- B. Hirschsprung's disease
- C. Achalasia cardia
- D. Esophageal perforation
- E. Esophageal cancer

38. A 26-year-old man has been hospitalized with complaints of a fever of 38°C, shortness of breath, and chest pain on the right during breathing and coughing. According to the patient's medical history, the patient has been ill for more than 6 weeks and was self-treating himself. Objectively, cyanosis of the lips and a pale face are observed. Pulse — 105/min. The heart sounds are weakened, the right half of the chest lags behind during breathing. Percussion detects a dull sound on the right, from the level of the fifth rib and lower, breathing on the right is markedly weakened. Pleural tap on the right yielded a turbid fluid. What is the most likely diagnosis in this case?

- A. Acute pericarditis
- B. Hydrothorax
- C. Pneumonia
- D. Lung cancer
- E. Right-sided exudative pleurisy

39. A 20-year-old man complains of headache, general weakness, and face edema that appears in the morning. According to the patient's medical history, eighteen days earlier he had a case of acute tonsillitis. Objectively, his skin is pale, edema is observed under his eyes. Heart rate — 60/min., blood pressure — 185/100 mm Hg. The sign of costovertebral angle tenderness (percussion test in the lumbar region) is negative on both sides. Urinalysis: color — dirty-red, protein — 4.5 g/L, altered erythrocytes — 40–45 in sight, leukocytes — 5–6 in sight, the daily diuresis is 400 mL per 24 hours. What is the most likely diagnosis in this case?

- A. Urolithiasis
- B. Renal amyloidosis
- C. Acute pyelonephritis
- D. Systemic lupus erythematosus
- E. Acute glomerulonephritis

40. On the third day after the artificial termination of pregnancy, a 20-year-old patient developed cramping pain in her lower abdomen, purulent discharge with an unpleasant odor from the genital tract, and a fever of 38°C. Vaginal examination shows that the uterus is enlarged to 4–5 weeks of pregnancy, painful to palpation, soft, and mobile. The appendages on both sides cannot be detected. What is the most likely diagnosis in this case?

- A. Acute endometritis
- B. Acute salpingo-oophoritis
- C. Chronic endometritis
- D. Uterine myoma
- E. Cancer of the body of the uterus

41. A 35-year-old woman complains of rapid fatigability, palpitations, brittle nails, and hair loss. Complete blood count: erythrocytes — $2.3 \cdot 10^{12}/L$, hemoglobin — 65 g/L, color index — 0.7, reticulocytes — 0.5%, platelets — $200 \cdot 10^9/L$, leukocytes — $6.6 \cdot 10^9/L$, band neutrophils — 2%, segmented neutrophils — 56%, eosinophils — 2%, basophils — 1%, lymphocytes — 29%, monocytes — 10%, anisocytosis, poikilocytosis, ESR — 5 mm/hour. What is the most likely diagnosis in this case?

- A. Vitamin B_{12} deficient anemia
- B. Hemolytic anemia
- C. Acute lymphoblastic leukemia
- D. Iron deficiency anemia
- E. Agranulocytosis

42. A woman has been hospitalized into the gynecological inpatient department with complaints of pain in her lower abdomen

and dizziness. According to the patient's medical history, her last menstruation was 6 weeks ago. Objectively, her skin is pale, blood pressure — 80/60 mm Hg, pulse — 94/min. The sign of peritoneal irritation in the lower segments is positive. Vaginal examination shows that the uterus is slightly enlarged, the appendages are enlarged on the right and painful. Promtov's sign is positive. What is the most likely diagnosis in this case?

- A. Ruptured cyst of the right ovary
- B. Pedicle torsion of a cyst of the right ovary
- C. Acute adnexitis
- D. Ovarian apoplexy
- E. Interrupted ectopic pregnancy

43. A 40-year-old woman complains of headache attacks, throbbing in the temples, dizziness, palpitations, and muscle weakness. During the attack, she becomes pale and her blood pressure rises significantly to 270/160 mm Hg. These attacks occur mainly at night. Taking hypotensive agents in tablets does not improve her condition. What drug would be most effective in this case, when taken parenterally?

- A. Magnesium sulfate
- B. Clonidine
- C. Captopril
- D. Dibazol (Bendazol)
- E. Phentolamine

44. A 48-year-old woman complains of frequent unprovoked attacks of palpitations, headache, and dizziness, accompanied by chills, fear of death, skin pallor, and a blood pressure increase to 260–300/170–200 mm Hg. Hyperglycemia, glycosuria, and leukocytosis can be diagnosed during the attacks. What is the most likely diagnosis in this case?

- A. Pheochromocytoma
- B. Primary hyperaldosteronism
- C. Cushing syndrome
- D. Essential arterial hypertension
- E. Coarctation of the aorta

45. A 64-year-old patient came to a doctor with complaints of edemas of the legs, lumbar region, and anterior abdominal wall. The patient has a history of chronic bronchitis with bronchiectasis. Objectively, the following is observed: body temperature — 37.2°C, blood pressure — 110/75 mm Hg, pulse — 82/min., respiratory rate — 19/min. General urinalysis: specific gravity — 1.025, protein — 9.9 g/L, leukocytes — 2–3 in sight, erythrocytes — 1–2 in sight, no casts. Daily proteinuria is 11.4 g per 24 hours. Blood biochemistry test: total protein — 52 g/L, albumins — 30 g/L, cholesterol — 9.6 mmol/L. What type of kidney disorder is most likely in this patient?

- A. Tubulointerstitial nephritis, nephrotic syndrome
- B. Amyloidosis, nephrotic syndrome
- C. Pyelonephritis, urinary syndrome
- D. Glomerulonephritis, nephritic syndrome
- E. Diabetic nephropathy, nephritic syndrome

46. No labor activity is observed in a 30-year-old woman with the gestation term of 40 weeks. Objectively, she has edema of the legs and face, her blood pressure is 180/120 mm Hg. According to the patient's history, she had one episode of seizures at home. The started therapy was ineffective. What are the further tactics of managing this pregnant woman?

- A. Stimulation of labor
- B. Starting the infusion therapy
- C. Cesarean section
- D. Monitoring in the intensive care unit
- E. Starting the sedative therapy

47. A 25-year-old man complains of a headache, an elevated body temperature, and a rash. According to the patient's medical history, three weeks ago he had a case of an acute respiratory viral infection. Objectively, the following is observed: petechial rash on symmetrical parts of the body, mainly on the legs and buttocks, body temperature — 37.4°C, blood pressure — 110/80 mm Hg. Complete blood count: erythrocytes — $3.2 \cdot 10^{12}/L$, hemoglobin — 110 g/L, color index — 0.9, platelets — $160 \cdot 10^9/L$, leukocytes — $8.7 \cdot 10^9/L$, eosinophils — 4%, basophils — 0%, band neutrophils — 7%, segmented neutrophils — 56%, lymphocytes — 26%, monocytes — 7%, ESR — 17 mm/hour. What is the most likely diagnosis in this case?

- A. Hemorrhagic vasculitis
- B. Idiopathic thrombocytopenic purpura
- C. Hemophilia A
- D. Acute lymphoblastic leukemia
- E. Avitaminosis C

48. A 46-year-old woman complains of general weakness, drowsiness, constant fatigue, low working ability, constipations, edema of her face and limbs. According to the patient's medical history, she underwent a partial thyroidectomy one year ago. Objectively, her body temperature is 36°C. Her skin is dry and wrinkled. She started losing her hair and developed amenorrhea. What medical condition has developed in the patient?

- A. Chronic thyroiditis
- B. Hypoparathyroidism
- C. Primary hypothyroidism
- D. Cushing syndrome
- E. Thyrotoxicosis

49. A 44-year-old woman complains of generally feeling unwell, chills, a fever of 39°C, and constant burning pain, skin

redness, and edema in the area of her left lower leg. She associates the onset of the disease with a scratch on the skin of her left lower leg that she received two days ago. Objectively, in the middle third of the left lower leg, there is a bright area of skin hyperemia with clear borders that is raised above the unchanged skin. Moderate edema of soft tissues is observed, the soft tissues are painful during palpation. In the center of the hyperemic skin, there is a scab 2x0.2 cm in size that covers a small superficial wound. What complication of the microtrauma of the left lower leg is observed in the patient?

- A. Gas gangrene
- B. Phlegmon
- C. Acute deep vein thrombophlebitis
- D. Erysipelas
- E. Acute purulent osteomyelitis

50. Examination of the children at a boarding school has detected reduced working ability, rapid fatigability, apathy, and drowsiness in the children. Bleeding gums and subcutaneous punctate hemorrhages were observed in 19% of the examined children. What vitamin is lacking in the examined children?

- A. B₆
- B. K
- C. E
- D. C
- E. B₁

51. A 4-month-old child had an acute onset of the disease. The following symptoms developed: a fever of 38.5°C, one episode of vomiting, lethargy. Ten hours later, a rash in the form of petechiae, spots, and papules appeared on the buttocks and legs. Some of the hemorrhagic elements have necrosis in their center. What is the most likely diagnosis in this case?

- A. Meningococcemia
- B. Influenza
- C. Rubella
- D. Hemorrhagic vasculitis
- E. Scarlet fever

52. A 12-year-old girl complains of a high body temperature, muscle pain, and difficulty swallowing food. Objectively, the following is observed: periorbital edema with a pink-purple tint, pain and decreased muscle tone on palpation, capillaritis in the area of the finger pads and palms, expanded borders of the heart, muffled heart sounds, hepatosplenomegaly. Laboratory testing revealed increased levels of creatinine in blood and urine. What is the most likely diagnosis in this case?

- A. Juvenile rheumatoid arthritis
- B. Scleroderma
- C. Dermatomyositis
- D. Periarthritis nodosa
- E. Systemic lupus erythematosus

53. A 42-year-old man complains of a headache, masticatory muscle spasm, and dysphagia. According to the patient's medical history, 2 weeks ago, while working in the field, he injured his foot. Objectively, he has a sardonic smile, profuse sweating, and tachycardia. Tendon reflexes are high. External stimuli provoke paroxysms of reflex seizures. What is the most likely diagnosis in this case?

- A. Rabies
- B. Meningoencephalitis
- C. Tetanus
- D. Jacksonian epilepsy
- E. Kozhevnikov epilepsy

54. A 32-year-old woman complains of aching pain in her lower abdomen and intensified and painful menstruations. She has a history of 2 abortions and no childbirth. Objectively, the skin is pale, the abdomen is soft and painless, a tumor-like mass is palpable above the pubis. Bimanual examination shows that the body of the uterus is enlarged to 14 weeks of pregnancy, dense, mobile, with an uneven surface. The appendages are not palpable. What is the most likely diagnosis in this case?

- A. Uterine leiomyoma
- B. Pregnancy
- C. Endometriosis
- D. Kidney tumor
- E. Ovarian cystoma

55. A 3-month-old child developed vomiting, shrill crying for no reason, persistent intertrigo, rashes on the body, and a characteristic "mouse" smell of urine. Objectively, neurological symptoms are observed: muscle hypotonia and generalized seizures. What is the most likely diagnosis in this case?

- A. Coeliac disease
- B. Diabetes mellitus
- C. Tay-Sachs disease
- D. Phenylketonuria
- E. Mucoviscidosis

56. During the hygienic assessment of the microclimate in a classroom, the results were as follows: average temperature in the classroom — $+17^{\circ}\text{C}$, horizontal temperature distribution — 3°C , vertical temperature distribution — 2°C , 24-hour fluctuation — 6°C , dry-bulb temperature — $+17^{\circ}\text{C}$, wet-bulb temperature — $+14^{\circ}\text{C}$, atmospheric air pressure — 745 mm Hg, air velocity — 0.3 m/s. Make the hygienic assessment of the microclimate in the classroom.

- A. Uncomfortable, cooling
- B. —
- C. Uncomfortable, heating
- D. Comfortable
- E. Uncomfortable, with high humidity

57. A 6-year-old child complains of a headache, weakness, and pain during chewing. Objectively, bilateral enlargement of the salivary glands is observed. The enlarged glands fill the retromandibular fossa. The skin over the glands is tense, glossy, and normal-colored. Body temperature — 39°C . The oral mucosa is dry, with edematous external openings of the salivary gland ducts. What is the most likely diagnosis in this case?

- A. Infectious mononucleosis
- B. Tumors of the salivary glands
- C. Epidemic parotitis
- D. Diphtheria
- E. Sialolithiasis

58. A 9-year-old girl complains of a fever, profuse sweating, and pain in the joints and heart. Objectively, the following is observed: livedo reticularis on the hips, buttocks and back, a polymorphic rash with fine punctate hemorrhages, small subcutaneous nodules along the course of the vessels in the limbs. On the third day after the onset of the disease, a cerebral crisis developed with headache, vomiting, and meningeal symptoms. Blood pressure — 160/90 mm Hg. What is the most likely diagnosis in this case?

- A. Systemic lupus erythematosus
- B. Periarthritis nodosa
- C. Wegener's granulomatosis
- D. Systemic scleroderma
- E. Dermatomyositis

59. In the infectious diseases department of a city hospital, a bacteriological study of the air has been carried out. What device were the researchers using in the process?

- A. Hygrograph
- B. Luxmeter
- C. Krotov's apparatus
- D. Aneroid barometer
- E. Electrical aspirator

60. A 40-year-old man complains of high body temperature, chills, tachycardia, and pain in the area of his liver. Ultrasound detects a hypoechoic focus with clear contours and homogeneous contents in the right lobe of the liver, against the background of which there is a high-intensity inclusion. The CT scan revealed a round mass with smooth clear contours and a gas bubble in its upper part. Blood tests detect leukocytosis and elevated ESR. What is the most likely diagnosis in this case?

- A. Cavernous hemangioma of the liver
- B. Cancer metastasis
- C. Solitary hepatic cyst
- D. Liver abscess
- E. Capillary hemangioma of the liver

61. A 42-year-old woman complains of general weakness and producing bloody discharge at the end of an act of defecation. Examination with a rectal speculum detects soft, painless, dark cherry-red protrusions with an eroded surface in the anal canal. What is the most likely diagnosis in this case?

- A. Rectal polyp
- B. Internal hemorrhoids
- C. Chronic proctitis
- D. Rectal tumor
- E. Crohn's disease

62. A 20-year-old patient complains of dizziness, pain in the heart, and fatigue. Objectively, the muscles of the upper body are hypertrophied with relative hypotrophy of the muscles of the pelvis and legs, a systolic murmur can be heard along the left edge of the sternum. Blood pressure in the arms — 180/90 mm Hg, blood pressure in the legs — 130/85 mm Hg. ECG shows signs of left ventricular hypertrophy. What is the most likely diagnosis in this case?

- A. Ventricular septal defect
- B. Mitral stenosis
- C. Coarctation of the aorta
- D. Aortic valve insufficiency
- E. Tricuspid insufficiency

63. A 24-year-old woman complains of marked muscle weakness, periodic diplopia, infrequent nonproductive cough, and choking when swallowing water. Objectively, the following is observed: moderate swelling of neck veins, pulse — 82/min., blood pressure — 110/80 mm Hg. Auscultation detects vesicular respiration over the lungs. Percussion produces a clear pulmonary sound. Vascular bundle width — 11 cm. Heart sounds are uniformly weakened. Chest X-ray revealed a retrosternal pear-shaped infiltrate 8x6 cm in size in the frontal and lateral projections. What is the most likely diagnosis in this case?

- A. Esophageal diverticulum
- B. Thymoma
- C. Aortic aneurysm
- D. Mediastinal neurinoma
- E. Esophageal cancer

64. The general condition of a 20-year-old patient became worse on the eighth day after the onset of chickenpox: a fever of 38.7°C, loss of consciousness, and seizures developed. Objectively, the patient's consciousness score is 13 according to the Glasgow Coma Scale. On the skin of the face, torso, and limbs, there are isolated elements of a fading rash that are scabbed over. What medicine should be

prescribed for etiologic therapy in this case?

- A. Acyclovir
- B. Oseltamivir
- C. Ceftriaxone
- D. Vancomycin
- E. Colchicine

65. A 6-year-old child became acutely ill and developed a fever, headache, and pain during swallowing. Three hours later, a bright red, fine, punctate rash appeared on the hyperemic skin. The rash elements are more numerous on the lateral surfaces of the trunk and in the natural folds. The oropharyngeal mucosa has a clearly demarcated hyperemia and there is a purulent coating on the tonsils. What disease is most likely in the child?

- A. Rubella
- B. Infectious mononucleosis
- C. Diphtheria
- D. Measles
- E. Scarlet fever

66. A 22-year-old woman complains of a two month menstruation delay. Her preferences in food have changed. According to the patient's medical history: childbirths — 0, abortions — 0. Vaginal examination detects cyanotic mucosa of the vagina and cervix, the uterus is spherical, soft, and enlarged to 7-8 weeks of pregnancy. The appendages are normal. The isthmus of the uterus is softened. The vaginal fornices are free. What is the most likely diagnosis in this case?

- A. Hydatidiform mole
- B. Chorioepithelioma
- C. Uterine myoma
- D. Cervical cancer
- E. Pregnancy

67. The parents complain that from the first weeks of life their 11-month-old child had a constant cough with difficult expectoration. Objectively, the child lags behind in physical development, cyanosis of the nasolabial triangle is observed. Laboratory testing results: neutrophilic leukocytosis, blood electrolytes (Na^+ — 130 mmol/L, Cl^- — 88 mmol/L), sweat chlorides — 80 mmol/L. What is the most likely diagnosis in this case?

- A. Pneumonia
- B. Congenital lung defect
- C. Acute obstructive bronchitis
- D. Mucoviscidosis
- E. Bronchiolitis

68. A 43-year-old patient complains of persistent pain in the epigastrium that cannot be relieved by taking antacids. Fibrogastroduodenoscopy detects multiple ulcerative lesions in the stomach and duodenum against the background of marked hyperacidity. Blood testing detects increased gastrin levels. What is the most likely di-

agnosis in this case?

- A. Zollinger-Ellison syndrome
- B. Crohn's disease
- C. Gilbert's syndrome
- D. Acute pancreatitis
- E. Dubin-Johnson syndrome

69. A 3-year-old boy was in contact with a girl who had a catarrhal stage of measles. The patient was administered an immunoglobulin. What is the maximum duration of the incubation period in this case?

- A. 17 days
- B. 7 days
- C. 28 days
- D. 14 days
- E. 21 days

70. A 24-year-old woman has been noting a cold sensation in her fingers for the last three years. During such episodes, her fingers become cyanotic-white and numb. After 5–10 minutes pass, the skin becomes red and the fingers warm up, which is accompanied by sharp pain. What is the most likely diagnosis in this case?

- A. Obliterating endarteritis
- B. Buerger's disease
- C. Raynaud's disease
- D. Obliterating atherosclerosis
- E. Sjogren's disease

71. A 6-year-old child has been diagnosed with peptic ulcer disease of the duodenum. What antibacterial agent should be prescribed along with clarithromycin and omeprazole to eradicate the *Helicobacter pylori* infection?

- A. Vancomycin
- B. Ciprofloxacin
- C. Meropenem
- D. Amoxicillin
- E. Gentamicin

72. A 17-year-old patient complains of headache, sore throat, and a fever. According to the patient's medical history, the onset of the disease was 2 days ago. Objectively, the patient's condition is severe, body temperature — 38°C. The oropharyngeal mucosa is moderately hyperemic and edematous. Filmy deposits that are difficult to remove are observed on the tonsils, palate, and uvula. Palpation detects enlarged submandibular lymph nodes and edematous subcutaneous tissue on the neck. What is the most likely diagnosis in this case?

- A. Tularemia
- B. Infectious mononucleosis
- C. Peritonsillar abscess
- D. Acute lymphoblastic leukemia
- E. Diphtheria

73. A 50-year-old woman complains of acute pain in the epigastric region, vomiting, and sudden general weakness. The disease onset was 2 days ago. Objectively, she has pale skin and dry tongue. Pulse — 100/min., of poor volume, blood pressure — 110/70 mm Hg. During palpation, the abdomen is soft, moderately painful in the epigastrium and mesogastrium, there are no signs of peritoneal irritation. Peristalsis is significantly increased in the mesogastrium on the left. X-ray detected Klover bowls (air-fluid levels) on the left. What is the most likely diagnosis in this case?

- A. Acute pancreatitis
- B. Perforated duodenal ulcer
- C. Intestinal obstruction
- D. Acute cholecystitis
- E. Food poisoning

74. A 22-year-old woman complains of a rash on the legs and torso and a subfebrile body temperature. According to the patient's medical history, one month ago she had a severe nosebleed. Objectively, her skin is pale, a maculopetechial hemorrhagic rash is observed on her chest and legs. Tourniquet test is positive. Complete blood count: hemoglobin — 80 g/L, erythrocytes — $3.2 \cdot 10^{12}/L$, platelets — $28 \cdot 10^9/L$, ESR — 12 mm/hour. There are numerous megakaryocytes in the bone marrow. What is the most likely diagnosis in this case?

- A. Iron deficiency anemia
- B. Typhoid fever
- C. Disseminated intravascular coagulation syndrome
- D. Hemorrhagic vasculitis
- E. Idiopathic thrombocytopenic purpura

75. A 20-year-old woman complains of weakness, fever, enlarged supraclavicular lymph nodes, itchy skin, profuse night sweats, and the weight loss of 10 kg over the past 3 months. What examination would be most informative in making the diagnosis in this case?

- A. Roentgenoscopy of the stomach
- B. Lymph node puncture
- C. Lymph node biopsy
- D. Computed tomography of the neck
- E. Lymph node ultrasound

76. A 24-year-old woman with the gestation term of 18–19 weeks was hospitalized into the gynecological department due to isthmic-cervical insufficiency diagnosed during an ultrasound scan. Examination shows that the cervix is shortened to 1.5 cm, the epithelium is without pathological changes, the cervical canal allows inserting one finger. The amniotic sac is intact, the uterus is enlarged to 18–19 weeks of pregnancy and normotonic. What aid must be provided for the pregnant

woman?

- A. Cervical stitch
- B. Sedative therapy
- C. Tocolytic therapy
- D. Termination of pregnancy
- E. Hormone therapy

77. A 50-year-old man complains of shortness of breath that becomes worse during physical exertion. According to the patient's medical history, he has been smoking for the last 30 years. Objectively, the following is observed: body temperature — 36.5°C , respiratory rate — 22/min., heart rate — 88/min., blood pressure — 130/85 mm Hg. The chest is barrel-shaped, auscultation detects weakened vesicular respiration with a bandbox resonance over the entire surface of the lungs. What is the most likely diagnosis in this case?

- A. Pulmonary tuberculosis
- B. Chronic obstructive pulmonary disease
- C. Bronchogenic carcinoma
- D. Bronchiectasis
- E. Pneumonia

78. Several chemical substances enter the human body from atmospheric air. What is the type of joint action, where the overall effect on the human body is more than the sum of the individual effects of each separate substance included in the combination?

- A. Combined action
- B. Antagonism
- C. Isolated action
- D. Complex action
- E. Potentiation

79. A 2-year-old child with an acute respiratory viral infection acutely developed a hoarse voice and noisy inhalation. When the child cries, depression of the supraclavicular and subclavian fossae and increasing inspiratory dyspnea are observed. When the child is at rest, these signs disappear. What is the most likely diagnosis in this case?

- A. Acute stenosing laryngotracheitis
- B. Airway foreign body
- C. Acute pleurisy
- D. Pneumonia
- E. Acute obstructive bronchitis

80. A 6-year-old child complains of a fever of 39.9°C , itching skin, decreased appetite, and a rash all over the body. According to the patient's medical history, the onset of the disease was 3 days ago. Objectively, the skin is pale, there is a polymorphous rash in the shape of spots, papules, vesicles, and scabs on the scalp, face, torso, and limbs. What is the most likely diagnosis in this case?

- A. Pseudotuberculosis
- B. Scarlet fever
- C. Chickenpox
- D. Infectious mononucleosis
- E. Measles

81. Based on the results of five-year monitoring, the data were obtained on the impact of the atmospheric air pollution on the incidence of respiratory diseases among the population of a large city. What statistical data processing method can be used to establish a relationship between these parameters?

- A. Correlation analysis
- B. Standardization method
- C. Regression analysis
- D. Student's t-distribution
- E. Mean values calculation

82. A 19-year-old girl complains of weakness, moderate headache, and sore throat when swallowing. She has been ill for 3 days already. Objectively, her body temperature is 38.2°C . Generalized lymphadenopathy, signs of tonsillopharyngitis, and moderate hepatosplenomegaly are observed. Complete blood count detected 35% of atypical mononuclear cells. What test should she be referred for, to verify the diagnosis?

- A. Blood testing for *IgManti* — CMV
- B. Blood testing for *IgManti* — VCAEBV
- C. Blood testing for total antibodies to HIV
- D. Blood testing for *IgManti* — HHV — 7
- E. Blood testing for *IgManti* — HHV — 6

83. A 53-year-old patient complains of weakness, lack of appetite, weight loss, and an increased body temperature. Objectively, hepatomegaly and lymphadenopathy with doughy lymph nodes are observed. Complete blood count: erythrocytes — $4.0 \cdot 10^{12}/\text{L}$, hemoglobin — 110 g/L, leukocytes — $100 \cdot 10^9/\text{L}$, basophils — 1%, eosinophils — 1%, band neutrophils — 1%, segmented neutrophils — 22%, monocytes — 2%, lymphocytes — 73%, Gumprecht shadows. What is the most likely diagnosis in this case?

- A. Acute lymphoblastic leukemia
- B. Chronic lymphocytic leukemia
- C. Lymphogranulomatosis
- D. Multiple myeloma
- E. Chronic myeloid leukemia

84. A 32-year-old woman at 35 weeks of her pregnancy complains of a headache, impaired vision, and visual snow. Examination detects anasarca and the blood pressure of 180/120 mm Hg. Suddenly, the woman developed fibrillar twitching of her facial muscles, tonic seizures, and a respiratory arrest, resuming breathing only after one minute had passed. A large amount of foam was produced from her mouth. Urinalysis detects protein levels of 7 g/L. What is the most likely diagnosis in

this case?

- A. Eclampsia
- B. Addisonian crisis
- C. Hypertensive crisis
- D. Severe preeclampsia
- E. Epilepsy

85. A 38-year-old patient complains of pain in the lower back and left knee and ankle joints. Blood test results: leukocytes — $11 \cdot 10^9/L$, ESR — 38 mm/hour, CRP — ++, ASL-O titer — 125 units, uric acid — 375 $\mu\text{mol/L}$, rheumatoid factor — negative. Chlamydia were detected in the urethral swab. X-ray shows that the articular surfaces on the left are uneven, indistinct, the joint space is narrowed. What is the most likely diagnosis in this case?

- A. Reactive polyarthritis
- B. Spinal osteochondrosis
- C. Gouty arthritis
- D. Rheumatoid polyarthritis
- E. Ankylosing spondylitis

86. A 55-year-old woman complains of diarrhea, irritability, and peeling and pigmentation of the open areas of her body (neck, hands, and feet). According to her diet history, corn is one of the main components in her diet. The woman rarely eats other vegetables and legumes and does not eat meat or fish. What is the most likely diagnosis in this case?

- A. Biotin-responsive dermatosis
- B. Psoriasis
- C. Scurvy
- D. Beriberi
- E. Pellagra

87. To assess the lighting in classrooms, the percentage ratio was calculated between the natural lighting of the horizontal surfaces within the room and the simultaneous natural lighting by the diffused light under the open sky. What parameter was calculated, as a result?

- A. Coefficient of natural light
- B. Light uniformity
- C. Room depth coefficient
- D. Reflection coefficient
- E. Window-to-floor area ratio

88. A 27-year-old woman, gravida 1, para 1, was hospitalized into the maternity ward. She had a 3-year-long history of primary infertility. Contractions started 9 hours ago, occur every 4–5 minutes, and last 20–25 seconds. The waters broke 2.5 hours ago. The fetal heartbeat is 136/min. The small segment of the fetal head lies in the plane of the inlet into the lesser pelvis. The cervix is smoothed out, its opening is 4 cm. The amniotic sac is absent. What complication occurred during the childbirth?

- A. Pathological preliminary period
- B. Normal labor activity
- C. Secondary weakness of labor activity
- D. Discoordinated labor activity
- E. Primary weakness of labor activity

89. Six hours after fibroesophagogastroscopy, a 32-year-old woman developed a fever of 39°C , retrosternal pain, dry mouth, and increasing dyspnea. Examination detected a positive Romanov-Gerke sign and subcutaneous emphysema in the left supraclavicular space. What is the most likely diagnosis in this case?

- A. Pneumonia
- B. Pyopneumothorax
- C. Pleural empyema
- D. Acute abscess of the lung
- E. Acute mediastinitis

90. A 60-year-old woman fell on the outstretched palm of her right hand. Objectively, her radiocarpal joint is edematous. A bayonet-like deformation is observed. The fingers are half-bent and their active movements are limited. What is the most likely diagnosis in this case?

- A. Fracture of the radius in a typical location
- B. Fracture of the styloid process
- C. Fracture of the ulna
- D. Fracture of the scaphoid bone
- E. Contusion of the radiocarpal joint

91. A 25-year-old woman complains of shortness of breath during physical exertion, a fever of 37.8°C , dull pain in the area of her heart, and palpitations. According to the patient's medical history, 2 weeks ago she had a case of an acute respiratory viral infection. Objectively, she has pale skin, pulse — 95/min., blood pressure — 100/60 mm Hg. Auscultation detects vesicular respiration, respiratory rate — 22/min. The heart sounds are rhythmic, the first heart sound is weakened at the apex, a systolic murmur can be heard. ECG shows reduced voltage and negative T wave. Laboratory tests detect elevated levels of AST, LDH, and CPK. What is the most likely diagnosis in this case?

- A. Exudative pleurisy
- B. Acute pericarditis
- C. Infective endocarditis
- D. Viral myocarditis
- E. Acute myocardial infarction

92. An 8-year-old boy is registered for regular check-ups due to chronic bronchitis. Into what group should this child be enrolled for physical training at school?

- A. Treatment group
- B. Additional group
- C. Special group
- D. Preparatory group
- E. Main group

93. A 29-year-old woman with the gestation period of 39–40 weeks was hospitalized into a maternity hospital with vaginal bleeding and sharp abdominal pain that started one hour ago. Objectively, her blood pressure is 180/100 mm Hg. The fetal heartbeat cannot be auscultated. Vaginal examination detects hemorrhagic discharge with blood clots. The cervix is smoothed out and fully open. The amniotic sac is intact and constantly tense. The baby is in a cephalic presentation, with the large segment directed towards the entrance into the lesser pelvis. The placental tissue cannot be detected. What complication has occurred during the childbirth?

- A. Complete placenta previa
- B. Rupture of a vaginal varicosity
- C. Cervical rupture
- D. Placental abruption
- E. Rupture of the body of the uterus

94. A 48-year-old patient was undergoing treatment for 5 days for a myocardial infarction localized in the inferior left ventricular wall. Suddenly, arrhythmia developed after a recurrent pain attack. ECG shows the following: atrial contraction rate — 76/min., ventricular contraction rate — 38/min., P-R and R-R intervals have the same duration. What complication has developed in the patient?

- A. Pulmonary thromboembolism
- B. Atrial fibrillation
- C. Sick sinus syndrome
- D. Complete atrioventricular block
- E. Sinoatrial block

95. In 2021, after the development and proper registration of vaccines, mass vaccination against the coronavirus began, which was aimed at stopping the epidemic. To study the effectiveness of different vaccines, the results of the studies conducted in different countries were combined, which allowed to increase the sample size. What kind of statistical analysis is it?

- A. Randomized controlled trial
- B. Blind study
- C. Case-control study
- D. Case series
- E. Meta-analysis

96. A 28-year-old patient complains of periodic palpitation attacks. Objectively, the following is observed: blood pressure — 130/80 mm Hg, pulse — 65/min., the heart sounds are unchanged. ECG shows shortening of the P-Q interval, an additional excitation wave appearing in the QRS complex,

deformation of the QRS complex, and a negative R wave. What is the most likely diagnosis in this case?

- A. Ventricular extrasystole
- B. Paroxysmal supraventricular tachycardia
- C. Paroxysmal ventricular tachycardia
- D. Bundle branch block
- E. Ventricular preexcitation syndrome (WPW syndrome)

97. A 14-year-old girl developed a morning fever, cheilitis, stomatitis, photosensitization, leukocytosis of $24 \cdot 10^9/L$, and thrombocytopenia. Laboratory testing detected antinuclear antibodies in a high titer. What is the most likely diagnosis in this case?

- A. Systemic lupus erythematosus
- B. Juvenile idiopathic arthritis
- C. Dermatomyositis
- D. Sepsis
- E. Systemic scleroderma

98. A 24-year-old patient complains of sharp pain and a rash in the form of small vesicles on the left side of the trunk. The patient associates this condition with overexposure to cold. Objectively, small vesicles cluster together on the skin of the trunk on the left, along the nerve. Inflammatory erythema is observed on the periphery of the vesicles. What is the most likely diagnosis in this case?

- A. Syphilis
- B. Herpes simplex
- C. Dermatitis herpetiformis
- D. Eczema
- E. Shingles

99. A 36-year-old patient was hospitalized on the seventh day after the onset of the disease with complaints of marked weakness, high body temperature, headache, and pain in the calf muscles. Objectively, the skin and sclera are icteric, a hemorrhagic rash is observed on the skin. Diuresis — 200 mL. According to the patient's history, the patient went fishing 2 weeks ago. What is the most likely diagnosis in this case?

- A. Trichinellosis
- B. Brucellosis
- C. Leptospirosis
- D. Salmonellosis
- E. Yersiniosis

100. During examination, the patient presents with shortening of the left leg by 2 cm, external rotation of the foot, and a positive "stuck heel" sign (inability to perform the straight leg raise test). Active and passive movements in the hip joint are impossible due to pain. What is the most likely diagnosis in this case?

- A. Transtrochanteric fracture of the femur
- B. Medial femoral neck fracture
- C. Fracture of the bottom of the acetabulum
- D. Greater trochanteric fracture
- E. Hip dislocation

101. A 23-year-old patient complains of swelling and pain in the knee and elbow joints, rapid heartbeat, and a fever of 38°C. The patient has a history of an acute respiratory viral infection that occurred 2 weeks ago. Objectively, swelling of knee and elbow joints is observed. Pulse — 94/min., transverse cardiac diameter — 14 cm. Auscultation detects weakening of the first heart sound and a systolic murmur at the apex. Complete blood count: leukocytes — $9.1 \cdot 10^9/L$, ESR — 18 mm/hour. Urinalysis: protein — 0.033 g/L, leukocytes — 6–8 in sight. ECG shows sinus tachycardia, PQ interval — 0.24 seconds. What is the most likely diagnosis in this case?

- A. Osteoarthritis
- B. Acute rheumatic fever
- C. Rheumatoid arthritis
- D. Reiter's disease
- E. Gout

102. A 19-year-old patient complains of loose stools with blood and mucus, occurring up to 8–9 times per 24 hours, weight loss of 10 kg over the past 4 months, and pain along the large intestine. Objectively, the abdomen is soft to palpation, painful in the left iliac region and periumbilical region. Blood test results: erythrocytes — $2.9 \cdot 10^{12}/L$, hemoglobin — 100 g/L, leukocytes — $10.2 \cdot 10^9/L$, eosinophils — 3%, band neutrophils — 8%, segmented neutrophils — 70%, lymphocytes — 14%. Colonoscopy detects brightly hyperemic mucosa and no vascular pattern. On the surface, there are multiple erosions and superficial ulcers, covered with fibrin in some places. What is the most likely diagnosis in this case?

- A. Crohn's disease
- B. Cholera
- C. Typhoid fever
- D. Colorectal cancer
- E. Nonspecific ulcerative colitis

103. An 18-year-old girl complains of itching and burning rashes on the skin of her face around the nose that appeared after overexposure to cold. Objectively, small vesicles with serous contents are located on the skin around the nose against the background of erythema and slight edema. What is the most likely diagnosis in this case?

- A. Allergic dermatitis
- B. Herpes simplex
- C. Streptococcal impetigo
- *D. Shingles
- E. Impetigo vulgaris

104. A 28-year-old woman came to a doctor with complaints of dull pain in her right breast, edema, and a feeling of heaviness and discomfort, especially before a menstruation. According to the patient's medical history, the onset of the disease was 3 months ago. Objectively, there are no pathological secretions from the gland, the areola is without changes. Palpation detects a tumor 3x3 cm in size in the upper-outer quadrant. The tumor is relatively mobile, moderately painful, and dense. The skin over the tumor is unchanged. What is the most likely diagnosis in this case?

- A. Breast cancer
- B. Paget's disease
- C. Breast fibroadenoma
- D. Diffuse cystic mastopathy
- E. Solitary cyst of the breast

105. Over the last week, an 8-month-old child has been presenting with difficulty breathing through the nose and mucopurulent nasal discharge. Examination detects edema of the nasal mucosa and mucopurulent discharge from the middle nasal meatus and along the posterior pharyngeal wall. What is the most likely diagnosis in this case?

- A. Ethmoiditis
- B. Frontitis
- C. Sphenoiditis
- D. Hemisinuitis
- E. Maxillary sinusitis

106. A 15-year-old girl complains of periodic pain in her lower abdomen, especially on the right. According to the patient's medical history, her menstrual function is normal, she does not have a sexual life. Recto-abdominal examination detects an unchanged uterus, the appendages cannot be detected on the left, and an ovoid formation is palpable on the right. The formation is 10x11 cm in size, dense and elastic, mobile, painless, with a smooth surface. What is the most likely diagnosis in this case?

- A. Chronic salpingo-oophoritis
- B. Ectopic pregnancy
- C. Acute appendicitis
- D. Ovarian apoplexy
- E. Tumor of the right ovary

107. Examination of a 3-month-old child detected skin hyperemia in the area between the buttocks and inguinal regions with large foci of weeping skin that have clear edges. On the periphery of the foci, there is a border of macerated epidermis. On the surface of the foci, there is a white film that can be easily removed. Microscopy detects mycelium and fungal spores. What is the most likely diagnosis in this case?

- A. Diaper dermatitis
- B. Dermatitis herpetiformis
- C. Epidermophytia of the skin folds
- D. Candidiasis
- E. Eczema

108. A chemical plant worker was diagnosed with a malignant neoplasm of the urinary bladder during a regular medical examination. This occupational disease is likely to be caused by exposure to a certain industrial toxin. Name this toxin.

- A. Arsenic
- B. Benzidine
- C. Asbestos
- D. Vinyl chloride
- E. Nickel carbonyl

109. A 25-year-old woman was hospitalized into the maternity hospital at 34 weeks of her pregnancy with complaints of bright-colored bloody discharge with clots that appeared after a defecation. Objectively, the fetal head is palpable near the uterine fundus. Fetal heart rate — 140/min. No labor activity. Vaginal examination shows that the cervix is 3 cm long, its opening allows inserting a fingertip, a soft formation can be palpated through the vaginal fornix. The discharge is hemorrhagic and bright-colored. What is the most likely diagnosis in this case?

- A. Uterine rupture
- B. Premature birth
- C. Placenta praevia
- D. Low-lying placenta
- E. Placental abruption

110. In a city, the levels of manganese are elevated in the atmospheric air, potable water, and agricultural foods. What type of effect do these factors have on the health of the population?

- A. Synergistic
- B. Isolated
- C. Complex
- D. Combined
- E. Joint

111. At the dentist's office, a 23-year-old woman developed sudden dyspnea, dizziness, and tightness in her chest 3 minutes after the administration of lidocaine. Objectively, the patient's condition is severe, blood pressure — 70/30 mm Hg, pulse — 108/min., thready. Auscultation detects harsh vesicular breathing in the lungs, with numerous diffuse dry wheezes and distant crackles. What drug should be administered first in this case, to provide emergency aid for the patient?

- A. Euphylline (Theophylline)
- B. Adrenaline
- C. Morphine
- D. Salbutamol
- E. Prednisolone

112. A 19-year-old patient complains of a burning sensation in the eyes, redness of the right eye, and inability to open the eye in the morning. Objectively, the patient has hyperemia of the conjunctiva and purulent discharge in the inner corner of the eye. The cornea is transparent. What is the most likely diagnosis in this case?

- A. Styx
- B. Acute conjunctivitis
- C. Blepharitis
- D. Acute iridocyclitis
- E. Keratitis

113. What type of hospital is specifically organized to provide humane, customized, and family-oriented facilities for the care of dying patients?

- A. Specialized hospital (dispensary)
- B. Day-case care
- C. Comprehensive multidisciplinary hospital
- D. Sanatorium
- E. Hospice

114. A 60-year-old patient suddenly developed an attack of palpitations and dyspnea. Objectively, the following is observed: orthopnea, respiratory rate — 32/min., blood pressure — 80/40 mm Hg. Auscultation detects crepitation and fine vesicular crackles in the posterior basal segments of the lungs. ECG shows the ventricular rhythm rate of 160/min. and deformed QRS complexes with the width of 0.14 seconds. What emergency aid should be provided for this patient?

- A. Transesophageal electrocardiostimulation
- B. Novocainamide (Procainamide) intravenously
- C. Salbutamol via inhalations
- D. Amiodarone intravenously
- E. Electrical cardioversion

115. One hour after being fed with a milk formula, the baby developed cyanosis of the lips, mucosa, nails, and face. Later the baby developed nausea, increased salivation, pain in the epigastric region, vomiting, and diarrhea. The pediatrician detected signs of cardiopulmonary failure in the baby. Investigation determined that the milk formula was prepared using the water from a well. What is the most likely diagnosis in this case?

- A. Food poisoning caused by organochlorine pesticides
- B. Staphylococcal toxicosis
- C. Foodborne toxicoinfection
- D. Food poisoning caused by heavy metals
- E. Nitrate-nitrite intoxication

116. During examination, the patient presents with a lacerated wound in the area of the right lower leg. Dark blood constantly flows from the wound. What emergency aid should be provided in this case?

- A. Apply cold to the wound
- B. Apply a tourniquet above the wound
- C. Immobilize the limb
- D. Apply a tourniquet below the wound
- E. Apply a pressure bandage

117. A 38-year-old woman complains of increased blood pressure, headache, muscle weakness, and a sensation of "ants crawling" on her legs. Objectively, her pulse is 82/min., her blood pressure is 160/100 mm Hg. ECG shows signs of myocardial hypertrophy in the left ventricle. Blood test results: K^+ — 3.2 mmol/L, Na^+ — 150 mmol/L, elevated levels of aldosterone. Computed tomography of the retroperitoneal organs reveals an enlarged right adrenal gland. What drug should be prescribed for the patient to correct the arterial hypertension?

- A. Doxazosin
- B. Indapamide
- C. Spironolactone
- D. Amlodipine
- E. Torasemide

118. A man complains of dizziness and vomiting. Vomitus is dark-colored. According to the patient's history, he often drinks alcohol. Esophagogastroduodenoscopy shows that the contents of the stomach resembles "coffee grounds". In the area of the cardia, there are four longitudinal fissures in the mucosa, from which a small amount of blood is leaking. What is the most likely diagnosis in this case?

- A. Erosive gastritis
- B. Zollinger-Ellison syndrome
- C. Bleeding from gastric varices
- D. Mallory-Weiss syndrome
- E. Gastric cardia ulcer

119. Microclimate parameters were measured in the operating room of a regional clinical hospital. Test results were as follows: average air temperature — 23°C, relative air humidity — 48%, air velocity — 0.1 m/s. Make the hygienic assessment of the microclimate in the operating room.

- A. Uncomfortable, with increased air velocity
- B. Uncomfortable, with high humidity
- C. —
- D. Comfortable
- E. Uncomfortable, cooling

120. A 30-year-old woman complains of infertility during the 10 years of her married life. According to the patient's medical history, her menstruation has been irregular since the age of 17, with delays of a month or more. Objectively, she has excessive body weight and hirsutism. Bimanual examination shows that the body of the uterus is reduced in size, while the ovaries are enlarged, dense, painless, and mobile when moved. The basal temperature is monophasic. What is the most likely diagnosis in this case?

- A. Genital tuberculosis
- B. Polycystic ovary syndrome
- C. Ovarian cancer
- D. Genital endometriosis
- E. Follicular cysts of the ovaries

121. A 5-year-old child became acutely ill with a fever of 39.2°C, had one episode of vomiting, complaints of cramping pain in the abdomen, tenesmus, and frequent bowel movements that produce a small amount of feces and a large amount of mucus with pus and blood streaks. Examination detects a dense sigmoid colon that is painful to palpation. What is the most likely diagnosis in this case?

- A. Salmonellosis
- B. Rotavirus infection
- C. Shigellosis
- D. Cholera
- E. Acute appendicitis

122. A study was being performed among the city's population to determine the risk factors that contribute to the development of cerebrovascular morbidity. Two groups of people were formed: those who had cerebrovascular diseases and a group of otherwise similar people without a cerebrovascular pathology. What type of epidemiological research should be used in this case?

- A. Experimental study
- B. Cohort study
- C. Case reports
- D. Case series
- E. Case-control study

123. A 15-year-old girl complains of the absence of menstruations. Objectively, she has a short stature, a short neck with vertical skin folds on both sides, deformed auricles, and a low line of hair growth on her neck. Her chest is barrel-shaped, her elbow joints are deformed. There are multiple pigment spots on the skin of her torso and limbs. Her mammary glands are flat and the

nipples are underdeveloped. Her intelligence is not impaired. There are no Barr bodies in the cells of her buccal epithelium. What is the most likely diagnosis in this case?

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

124. A 5-year-old child complains of a cough that gradually intensifies. According to the patient's medical history, the onset of the disease was 12 days ago. Objectively, the body temperature is 37.1°C , the skin is pale, the oropharyngeal mucosa is pale pink. There is a small ulcer on the frenulum of the tongue. Coughing fits occur up to 20 times per 24 hours and can be characterized by a series of cough impulses, followed by a whistling inhalation. A coughing fit ends with the expectoration of vitreous sputum. Auscultation detects harsh respiration and dry (sometimes wet) crackles in the lungs. Chest X-ray shows a horizontal position of the ribs, an increased transparency of the lungs, and an expanded pulmonary pattern in the roots of the lungs. Complete blood count: leukocytosis — $23 \cdot 10^9/\text{L}$, eosinophils — 1%, band neutrophils — 3%, segmented neutrophils — 23%, lymphocytes — 70%, monocytes — 3%, ESR — 3 mm/hour. What is the most likely diagnosis in this case?

- A. Pertussis
- B. Laryngitis
- C. Pneumonia
- D. Bronchitis
- E. Tuberculosis

125. A 58-year-old patient complains of dizziness, diplopia, and disturbed gait. The patient has a history of three similar episodes. Objectively, the following is observed: horizontal nystagmus, diplopia, ataxia on the right in the Romberg's position. The patient performs coordination tests unsteadily on the right. Three hours later, the neurological symptoms regressed. What is the most likely diagnosis in this case?

- A. Ischemic stroke
- B. Transient ischemic attack
- C. Multiple sclerosis
- D. Subarachnoid hemorrhage
- E. Brain tumor

126. A 48-year-old patient developed sharp headache ("as if struck by a knife") and vomiting after emotional stress. The patient has a history of arterial hypertension. Objectively, general agitation and facial hyperemia are observed, as well as marked meningeal symptoms: nuchal rigidity, Kernig's sign, photosensitivity, and general hyperesthesia. The cranial nerves are without pathology.

There are no pareses. Reflexes are brisk and uniform. What is the most likely diagnosis in this case?

- A. Hemorrhagic stroke
- B. Subarachnoid hemorrhage
- C. Meningitis
- D. Ischemic stroke
- E. Encephalitis

127. A 27-year-old woman complains of sharp pain in her lower abdomen and dizziness. According to the patient's medical history, her last menstruation was 2 weeks ago. HCG test results are negative. Objectively, her skin is pale, blood pressure — 80/60 mm Hg, pulse — 92/min. The abdomen is tense, painful more on the right in its lower segments. Vaginal examination detects normal-sized uterus, the appendages are painful to palpation, the posterior fornix overhangs. What is the most likely diagnosis in this case?

- A. Acute appendicitis
- B. Pedicle torsion of an ovarian cyst
- C. Ovarian apoplexy
- D. Ectopic pregnancy
- E. Exacerbation of chronic right-sided adnexitis

128. A patient complains of unbearable cough with putrid-smelling chocolate-colored purulent sputum. The discharge of sputum reaches 600 mL per 24 hours. According to the patient's medical history, the disease onset was acute, with an irregular fever and the body temperature reaching 39°C . Chest X-ray shows a shadowed area with a cavity in its center that has irregular contours and a fluid level. What is the most likely diagnosis in this case?

- A. Bronchiectasis
- B. Cavertous tuberculosis
- C. Lung cancer with disintegration
- D. Lung abscess
- E. Pulmonary gangrene

129. A 38-year-old man complains of cough with purulent sputum (up to 60–80 mL per day) and a fever of 39°C . He associates his condition with overexposure to cold. Objectively, his pulse is 96/min., rhythmic. Blood pressure — 110/60 mm Hg. Examination revealed that the right side of the chest was lagging behind in the process of breathing. Respiratory rate — 30/min. Percussion detects local dullness of the sound near the angle of the scapula. Auscultation detects heterogeneous wet crackles and amphoric breathing. What is the most likely diagnosis in this case?

- A. Pleural empyema
- B. Bronchial asthma
- C. Acute bronchitis
- D. Pneumonia
- E. Acute lung abscess

130. A 40-year-old patient has been hospitalized with a closed chest trauma. Examination shows that the right side of the chest lags behind during breathing. Palpation detects a sharp pain in the projection of ribs V, VI, and VII on the anterior axillary line and subcutaneous emphysema on the right side of the torso. Percussion produces a tympanic sound over the chest segments on the right. Auscultation detects no breathing on the right and vesicular breathing on the left. What surgical procedure is necessary for this patient?

- A. Tight bandaging of the chest
- B. Drainage of subcutaneous emphysema
- C. Drainage of the right pleural cavity
- D. Immediate thoracotomy
- E. Splint stabilization of the rib fracture

131. A 45-year-old patient complains of a constant headache and pain in the heart and knee joints. According to the patient's medical history, three years ago the patient was bitten by a tick and ring-shaped erythema appeared on the skin at the site of the bite. Objectively, the patient has acrodermatitis, bilateral pyramidal insufficiency, and coordination disorders. What is the most likely diagnosis in this case?

- A. Neurosyphilis
- B. Ischemic encephalopathy
- C. Viral encephalitis
- D. Multiple sclerosis
- E. Neuroborreliosis

132. A 25-year-old woman complains of discomfort in the area of her external genitalia. The discomfort developed a few days ago. Objectively, in the area of the left labia, there is a painless red ulcerative skin lesion with clear and smooth edges, dense at its base. Painless enlargement of the right inguinal regional lymph node was detected. What is the most likely diagnosis in this case?

- A. Genital herpes
- B. Candidiasis
- C. Bartholinitis
- D. Carbuncle
- E. Primary syphilis

133. A 22-year-old woman complains of pain in her eye, lacrimation, photosensitivity, and decreased visual acuity. According to the patient's medical history, the patient uses contact lenses. Objectively, she has pericorneal injection and a gray infiltrate in the center of the cornea. The deep structures are without changes. What is the most likely diagnosis in this case?

- A. Conjunctivitis
- B. Blepharitis
- C. Keratitis
- D. Iridocyclitis
- E. Cataract

134. A 50-year-old patient complains of headache, itchy skin, and pain in the toes and muscles, especially during walking. Objectively, the skin of the face has a red-cyanotic tint. The lymph nodes are not palpable. Pulse — 76/min. Blood pressure — 180/100 mm Hg. The lungs have no abnormalities. The borders of the heart are displaced to the left by 2 cm. Hepatomegaly is observed. The spleen is near the edge of the costal arch, dense and painless. Complete blood count: erythrocytes — $6.3 \cdot 10^{12}/L$, hemoglobin — 201 g/L, color index — 0.8, leukocytes — $10.5 \cdot 10^9/L$, eosinophils — 4%, band neutrophils — 7%, segmented neutrophils — 62%, lymphocytes — 22%, monocytes — 5%, platelets — $500 \cdot 10^9/L$, ESR — 1 mm/hour, hematocrit — 55%. What is the most likely diagnosis in this case?

- A. Erythroleukemia
- B. Essential hypertension
- C. Obliterating endarteritis
- D. Cushing disease
- E. Polycythemia vera

135. A woman complains of frequent and copious foamy stools without pathological admixtures, cramping pain in her periumbilical region, rumbling in the abdomen, and fever. According to the patient's diet history, she was eating soft-boiled duck eggs. What is the most likely causative agent of her condition?

- A. *Escherichia coli*
- B. *Salmonella enteritidis*
- C. *Shigella sonnei*
- D. *Salmonella typhi*
- E. *V. cholerae*

136. Examination of the birth canal of a 24-year-old postparturient woman in the early postpartum period shows that the cervix is intact, but there is damage to the posterior vaginal wall and skin and muscles of the perineum. The rectal mucosa and the muscle that closes the anus are not damaged. What birth-related injury is observed in the patient?

- A. Third-degree perineal tear
- B. First-degree perineal tear
- C. Vaginal rupture
- D. Second-degree perineal tear
- E. Fissure of the posterior fourchette

137. A 28-year-old man without the permanent place of residence was hospitalized with the provisional diagnosis of influenza. On day 5 after the onset of the

disease, a roseolar petechial rash appeared on his trunk and on the inner surfaces of the limbs. Objectively, the patient presents with a fever of 40°C, euphoria, facial hyperemia, redness of the sclera, tremor of the tongue, tachycardia, splenomegaly, and agitation. What is the most likely diagnosis in this case?

- A. Typhoid fever
- B. Measles
- C. Delirium tremens
- D. Leptospirosis
- E. Epidemic typhus

138. A 50-year-old patient has been hospitalized with complaints of pain in the heart and shortness of breath that occurred suddenly after significant physical overexertion. ECG shows elevation of the ST segment in leads II, III, and aVF. Blood biochemistry test reveals that the levels of creatine phosphokinase-MB are twice higher than the norm. What is the most likely diagnosis in this case?

- A. Angina pectoris
- B. Acute posterior wall myocardial infarction
- C. Acute pericarditis
- D. Dissecting aortic aneurysm
- E. Acute anterior wall myocardial infarction

139. A 54-year-old patient complains of heaviness in the right hypochondrium, yellowing of the skin and sclera, dark urine and colorless stools. According to the patient's medical history, the jaundice has been persisting for the last 3 weeks and before that the patient was noting general weakness. Objectively, the patient's condition is satisfactory, the skin and sclerae are icteric. The abdomen is soft, an enlarged painless gallbladder can be palpated in the right hypochondrium. There are no symptoms of peritoneal irritation. What is the most likely diagnosis in this case?

- A. Choledocholithiasis
- B. Acute cholecystitis
- C. Pancreatic head cancer
- D. Acute hepatitis
- E. Hemolytic jaundice

140. Examination of a one-month-old child detected microphthalmia, microcephaly, hypotelorism, bilateral cleft lip and palate, polydactyly, and a ventricular septal defect. Genetic studies revealed trisomy 13. What is the most likely diagnosis in this case?

- A. Arnold-Chiari syndrome
- B. Down syndrome
- C. Lejeune syndrome
- D. Roberts syndrome
- E. Patau syndrome

141. A 35-year-old woman complains of general weakness, weight loss, a feeling of discomfort in the area of her left hypochondrium, a fever of 38°C, and excessive sweating.

Objectively, she has pale skin and mucosa, hepatosplenomegaly is observed. Complete blood count: erythrocytes — $3.96 \cdot 10^{12}/L$, hemoglobin — 100 g/L, leukocytes — $130 \cdot 10^9/L$, basophils — 4%, eosinophils — 7%, myeloblasts — 2%, promyelocytes — 8%, myelocytes — 14%, juvenile — 6%, band neutrophils — 12%, segmented neutrophils — 23%, lymphocytes — 24%, platelets — $640 \cdot 10^9/L$, ESR — 36 mm/hour. What is the most likely diagnosis in this case?

- A. Erythroleukemia
- B. Chronic myeloid leukemia
- C. Agranulocytosis
- D. Chronic lymphocytic leukemia
- E. Acute myeloid leukemia

142. A 64-year-old patient is undergoing outpatient treatment. According to the patient's medical history, the patient has ischemic heart disease, diffuse atherosclerosis, persistent atrial fibrillation, and functional class III heart failure. The pharmacotherapy consists of amiodarone twice a day, torasemide every other day, and trimetazidine twice a day. The family physician recommended taking warfarin (3 mg per day) to prevent thrombus formation. What parameter should be measured in this case for the optimal control of the effectiveness and safety of the anticoagulant therapy?

- A. International normalized ratio
- B. Fibrinogen levels
- C. Platelet count
- D. Lee-White clotting time
- E. Erythrocyte sedimentation rate

143. A 26-year-old patient developed swelling of the face, especially of the nose and lips, and hoarseness of the voice after eating strawberries. Objectively, the patient is agitated, cyanosis of the skin of the face and urticaria on the neck and chest can be observed. What is the most likely diagnosis in this case?

- A. Urticaria
- B. Cardiac asthma
- C. Anaphylactic shock
- D. Quincke's edema
- E. Bronchial asthma attack

144. A 30-year-old woman complains of her menstruations missing for a year. She has a history of a massive postpartum hemorrhage. Objectively, her secondary sex organs are normally developed, the hair growth pattern is of the female type. Bimanual examination detects normal uterus and uterine appendages. What is a possible cause of the amenorrhea in this case?

- A. Thyroid disorder
- B. Pituitary necrosis
- C. Adrenocortical necrosis
- D. Hypothalamic insufficiency
- E. Ovarian insufficiency

145. A 14-year-old girl complains of thirst, frequent urination, weight loss, itchy skin, and lethargy. Objectively, she has dry skin, decreased muscle tone and turgor, muffled heart sounds, and hepatomegaly. What is the most likely diagnosis in this case?

- A. Crohn disease
- B. Cushing disease
- C. Diabetes insipidus
- D. Acute glomerulonephritis
- E. Diabetes mellitus

146. A 75-year-old woman complains of a tumor in her right breast. In her left mammary gland, palpation detects no pathology. In her right mammary gland, a lumpy, dense, painless, non-mobile formation was detected. The skin above the formation resembles a "lemon rind". The nipple is retracted. Axillary, subclavian, and supraclavicular lymph nodes are not palpable. What pathological condition has most likely developed in the right mammary gland of the patient?

- A. Diffuse cystic mastopathy
- B. Solitary cyst
- C. Fibroadenoma
- D. Tuberculosis
- E. Malignant neoplasm

147. A 68-year-old man, undergoing inpatient treatment for unstable angina pectoris, suddenly lost his consciousness while walking and fell down. Objectively, there is no pulsation on the arteries, the pupils are constricted and unresponsive to light, rare low-amplitude movements of the chest (up to 8–10/min.) are observed, blood pressure cannot be measured. ECG shows a sinusoidal curve with rapid waves, differing in shape and amplitude, with the rate of 350–400/min. What complication has developed in the patient?

- A. Asystole
- B. Complete atrioventricular block
- C. Atrial fibrillation
- D. Ventricular fibrillation
- E. Pulmonary thromboembolism

148. After lifting a heavy object, a 39-year-old patient experienced a sharp pain in the lumbosacral region, radiating to the front surface of the thigh and to the inner surface of the lower leg on the right. Objectively, the following is observed: tension of the muscles in the lumbar region, scoliosis of the spine, and straightening of the lumbar lordosis. The spine mobility is reduced. Lasegue's sign is observed on the right. Paravertebral points L_3-L_5 are painful on the right, when pressed. Achilles reflex cannot be evoked on the right. Radicular hypoesthesia is observed in the right leg. What is the most likely diagnosis in this case?

- A. Lumboischialgia
- B. Radiculopathy
- C. Lumbalgia
- D. Lumbago
- E. Myositis

149. A 35-year-old man complains of nosebleeds, bleeding gums, drowsiness, and dizziness. The patient abuses alcohol and has a 6-year-long history of hepatic cirrhosis. Objectively, an unpleasant sweet smell can be detected from his mouth, the patient has ascites, jaundice, ataxia, and hyperreflexia. The liver is not palpable. Laboratory testing results are as follows: bilirubin — 150 $\mu\text{mol/L}$, ALT — 2.0 mmol/L , AST — 1.2 mmol/L , platelets — $130 \cdot 10^9/\text{L}$, prothrombin index — 52%. What complication has developed in the patient?

- A. Portal vein thrombosis
- B. Liver failure
- C. Bleeding from esophageal varices
- D. Uremic coma
- E. Liver cancer

150. A 36-year-old patient developed sharp pain in the epigastric region one hour ago. Objectively, the patient's tongue is dry, pulse — 56/min. The patient assumes a forced position, with the stomach pulled in by tensing the muscles. Hepatic dullness cannot be determined. Positive signs of peritoneal irritation are observed. What is the most likely diagnosis in this case?

- A. Acute intestinal obstruction
- B. Perforated gastric ulcer
- C. Acute gastritis
- D. Acute cholecystitis
- E. Acute pancreatitis