

1. A man suddenly developed a sharp retrosternal pain that radiated into the left arm. Objectively, the patient was excited, his skin was pale, the respiration rate was 38/min., the blood pressure was 180/110 mm Hg. Later he lost his consciousness, fell down, the pulse on the major vessels could not be detected, the pupils were evenly dilated. What is the diagnosis in this case?

- A. Clinical death
- B. Agonal state
- C. Coma
- D. Heart attack
- E. Cerebral circulation disorder

2. A 25-year-old woman had an abortion half a year ago. She complains of loss of appetite, weakness, and arthralgia. Two weeks later, she developed dark urine and jaundice. Against this background, her general condition continues to deteriorate. Viral hepatitis is suspected. What marker of viral hepatitis is likely to be positive in the patient?

- A. Anti-HBc IgM
- B. Anti-HEV IgM
- C. Anti-CMV IgM
- D. Anti-HBs
- E. Anti-HAV IgM

3. An 82-year-old woman was hospitalized into the cardiac intensive care unit with complaints of a sharp pain behind the sternum, a sensation of lack of air, and weakness. Chest X-ray shows that the transverse size of the cardiac shadow is enlarged, the shape of the shadow is triangular and has rounded cardiophrenic corners. Cardiac contractions are of small amplitude and arrhythmic. These X-ray findings most likely correspond with:

- A. Exudative pericarditis
- B. Aortic stenosis
- C. Trilogium of Fallot
- D. Dilated cardiomyopathy
- E. Myocarditis

4. A 48-year-old woman complains that within the last 8–9 months she had very heavy periods that impair her ability to work. For 2 years, her health has been monitored by a gynecologist for uterine fibroids. Objectively, her cervix is cylindrical, clean, the cervical opening is closed; the body of the uterus is enlarged up to 9–10 weeks of pregnancy, firm, mobile, and painless; the appendages on both sides cannot be determined; the parametria are free; the fornices are deep; mucous discharge is being produced. What is the most likely di-

agnosis in this case?

- A. Uterine fibroids
- B. Juvenile uterine bleeding
- C. Dysfunctional uterine bleeding
- D. Endometriosis that predominantly affects the body of the uterus
- E. Uterine fibroids and pregnancy

5. The mother of a 4-year-old girl came to an endocrinologist with complaints about the abnormal structure of the child's external genitalia: hypertrophy of the clitoris and an enlarged labia that resembles a scrotum. Additionally, the child exhibits accelerated growth, as well as growth of axillary and pubic hair, and lowering of the vocal timbre. What examination is necessary to confirm the diagnosis in this case?

- A. Measuring the 17-OH progesterone levels in blood serum and 17-ketosteroids excretion rate with urine
- B. Karyotyping
- C. Measuring the ACTH levels in blood
- D. Measuring the TSH levels in blood
- E. Bone age assessment

6. A person fell from a ladder from the height of 2 m. An emergency medicine physician suspects a vertebral compression fracture at the level of L1–L2. Objectively, the blood pressure is 100/60 mm Hg, the pulse is 104/min. What aid must be provided to the person at the scene of the accident?

- A. Analgesia, transportation into a hospital on hard stretchers
- B. Analgesia, antishock therapy, transportation into the inpatient department
- C. Transportation into the inpatient department in the position lying on the side
- D. Schneck's vertebral anesthesia, transportation into the inpatient department
- E. Analgesics intramuscularly, transportation in a sitting position

7. A 64-year-old patient with a tumor of the sigmoid colon and chronic thrombophlebitis of the deep veins of the right leg is scheduled for a surgery. What is the optimal medicine for prevention of deep vein thrombosis in this patient?

- A. Low-molecular-weight heparin
- B. Phenylin (Phenindione)
- C. Rheopolyglucin (Dextran)
- D. Acetylsalicylic acid
- E. Regular heparin

8. A 32-year-old patient looks at the pattern on the wallpaper and sees the lines begin to move and form silhouettes of fantastic animals. Instead of a lighting fixture hanging from the ceiling, he sees a giant octopus. What psychopathological symptom is it?

- A. Pareidolic illusions
- B. Visual hallucinations
- C. Pseudohallucinations
- D. Functional hallucinations
- E. Derealization

9. A 6-year-old child developed a fever of 37.5°C , stuffed nose with a small amount of mucous discharge, and a scratchy sensation in the throat. On the fourth day after the onset of the disease, the temperature normalized but complaints of pain in the legs appeared. The child started limping and dragging the left leg. Muscle tone and reflexes are decreased, while sensitivity is retained. What disease can be suspected in this case?

- A. Paralytic poliomyelitis
- B. Polyradiculoneuritis
- C. Diphtheritic polyneuritis
- D. Botulism
- E. Influenza with associated encephalopathy

10. A 32-year-old man came to a doctor with complaints of painless rashes that appeared on his knees 4 months ago and now start to appear on his elbows too. The rashes itch and bleed when scratched. The patient notes that on his elbows rash appeared after he had been scratched by a house cat. Physical examination detects dense erythematous plaques 2 to 3 cm in diameter on the knees and elbows. The plaques have a clear contour and are covered in silvery scales. What is the most likely diagnosis in this case?

- A. Psoriasis
- B. Eczema
- C. Contact dermatitis
- D. Seborrheic dermatitis
- E. Cat scratch disease

11. A baby with the gestation term of 30 weeks was born with the body weight of 1100.0 g. Three hours after birth, frequent apneas appeared, "gaspings" type of breathing is observed, the heart rate is 98/min. The Silverman score is 9 points. Additional oxygenation did not improve the child's condition. What must the doctor do next?

- A. Positive pressure ventilation of the lungs
- B. Tactile stimulation
- C. Tracheal intubation
- D. Artificial pulmonary ventilation
- E. External cardiac massage

12. A pediatrician needs to analyze the infant mortality rates. What must be taken as the unit of observation for this purpose?

- A. A case of death of a child under one year of age
- B. A case of death of a child within the first month of life
- C. A case of death of a child after 28 days of life
- D. A case of death of a child within the first 7 days of life
- E. A case of the death of a child during childbirth

13. A 10-year-old boy was treated in the cardiology department for rheumatism, first attack, active phase, second degree activity. Discharged in a satisfactory condition. What drug should be prescribed in this case for prevention of secondary rheumatism?

- A. Bicillin-5
- B. Bicillin-1
- C. Erythromycin
- D. Ampicillin
- E. Oxacillin

14. A 12-year-old child has been diagnosed with bilateral pneumonia of mycoplasma etiology with mild disease course. What drug must be prescribed for treatment in this case?

- A. Second generation macrolides
- B. First generation cephalosporins
- C. Aminoglycosides
- D. Aminopenicillins
- E. Antifungal agents

15. A 5-year-old child became acutely ill with the fever of 39.2°C , 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. Make the diagnosis.

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

16. A newborn baby developed a rash on

the body. The mother was not registered for prenatal care checkups. After birth, the child scored on the Apgar scale 7 and 9 points at 1 and 5 minutes of life respectively. Physical examination revealed the following: body temperature — 37°C , pulse — 145/min., respiratory rate — 33/min., petechial rash on the torso. Auscultation of the heart detects a systolo-diastolic murmur in the left subclavian region. What is the most likely diagnosis in this case?

- A. Rubella
- B. Cytomegalovirus infection
- C. Herpes simplex virus
- D. Syphilis
- E. Toxoplasmosis

17. A 30-year-old woman came to a doctor with complaints of menstruations that have been missing for two years after her second childbirth. The childbirth was complicated by a massive bleeding. After giving birth, the woman started noticing hair loss and weight loss. Objectively, the woman's body type is asthenic, her external genitalia are hypoplastic, the cervix is cylindrical, the body of the uterus is small and painless, the uterine appendages cannot be detected. What is the most likely diagnosis in this case?

- A. Pituitary amenorrhea (Sheehan syndrome)
- B. Uterine pregnancy
- C. Primary amenorrhea
- D. Stein-Leventhal syndrome
- E. Pituitary tumor (Cushing disease)

18. The mother of a 6-month-old boy came to a pediatrician. She is concerned that her child has not received any vaccinations. There are no health complaints. Objectively, the following is observed: body temperature — 37.1°C , respiratory rate — 20/min., blood pressure — 100/70 mm Hg, the child's height and weight are within the range between the 50th and 75th percentile. What tactics must the doctor choose in the immunization of this child according to the regulatory documents issued by the Ministry of Health?

- A. Perform a Mantoux test and make an appointment in 2 days
- B. Administer BCG vaccine
- C. Administer BCG, MMR, and DPT vaccines
- D. Postpone the vaccination and make an appointment in a week
- E. The child requires no vaccination

19. After the birth of twins, the

postparturient woman developed a massive hemorrhage from the natural birth canal. The placenta and birth canal are intact. The uterine fundus is located above the navel, the uterus is soft to palpation and does not respond to the administration of uterotonics. What is the most likely cause of the bleeding in this case?

- A. Uterine atony
- B. Damage to the uterine cervix
- C. Uterine rupture
- D. Retained placenta
- E. Uterine hypotonia

20. A man was undergoing treatment for a myocardial infarction. On day 13, his chest pain increased and he developed shortness of breath. Objectively, the following is observed: temperature — 38.2°C , pulse — 112/min., respiration rate — 26/min., fine bubbling crackles can be heard under the right shoulder blade. On day 15, he was diagnosed with right-sided exudative pleurisy. Complete blood count shows the following: leukocytes — $8.9 \cdot 10^9/\text{L}$, eosinophils — 8%. ESR — 24 mm/hour. What complication of myocardial infarction occurred in this patient?

- A. Dressler syndrome
- B. Pulmonary embolism
- C. Cardiac asthma
- D. Recurrent myocardial infarction
- E. Pneumonia

21. Screening detected phenylketonuria in a two-week-old baby. What treatment must be prescribed for this child to prevent severe complications in the future?

- A. Special diet
- B. Hormone therapy
- C. Vitamin therapy
- D. Antibiotic therapy
- E. Sunbathing

22. A 64-year-old man fell to the floor, landing on his left side. Objectively, shortening of the left limb and external rotation of the hip are observed. The patient is unable to perform the straight leg raise test. During palpation and tapping on the heel, the patient feels pain in the hip joint. What is the likely diagnosis in this case?

- A. Femoral neck fracture
- B. Contusion of the hip joint
- C. Hip dislocation
- D. Fracture of the upper third of the femur
- E. Greater trochanteric fracture

23. Potatoes that became green or started

sprouting, as a result of incorrect storage, taste slightly bitter. What toxic substance contained in such potatoes can cause food poisoning?

- A. Solanine
- B. Phasin
- C. Helvellic acid
- D. Muscarine
- E. Muscaridine

24. A pregnant woman suffers from essential hypertension of the first degree. At 35 weeks of gestation, she developed edemas of the legs and anterior abdominal wall. Her 24-hour urine protein is 5 g/L, the blood pressure increased to 170/120 mm Hg. She developed a headache and her vision became worse. Four hours of intensive treatment had no effect. What tactics would be necessary in this case?

- A. Immediate delivery by caesarean section
- B. Continuation of the intensive therapy
- C. Labor induction
- D. Conservative management of the delivery
- E. Preparation of the cervix for preterm birth

25. During coke production, the concentration of dust in the air of the working area has been for many years exceeding the maximum permissible concentration by 4–8 times. What disease is most likely to develop among the workers in this industry as a result?

- A. Anthracosis
- B. Siderosis
- C. Byssinosis
- D. Silicosis
- E. Asbestosis

26. For the last 3 months, a 68-year-old woman has been suffering from pain attacks in the heart that last for 10 minutes. The pain attacks occur in response to the slightest physical exertion. She does not take nitroglycerin because of severe headache. She was repeatedly treated for ischemic heart disease and had a myocardial infarction. Her blood pressure periodically rises to 160/80 mm Hg. ECG shows cicatricial changes in the posterior wall of the left ventricle. Auscultation reveals a systolic murmur over the aorta. What is the most likely diagnosis in this case?

- A. Stable exertional angina pectoris, FC IV
- B. Recurrent myocardial infarction
- C. Unstable angina pectoris
- D. Stable exertional angina pectoris, FC II
- E. Aortic aneurysm with aortic dissection

27. A 25-year-old woman complains of pain in her right iliac region that lasts for 10–12 days already and a menstruation delay of 7–8 weeks. Palpation detects pain in the right iliac region. Gynecological examination detects pain in the right vaginal fornix, but no enlargement of the uterus or ovaries. A right-sided ectopic pregnancy is suspected. What examination method would be optimal in this case?

- A. Ultrasound
- B. Pelvic X-ray
- C. Thermography
- D. Metrosalpingography
- E. Pneumogynecography

28. A 59-year-old woman complains of pain and edema in the small joints of her hands, shortness of breath, weakness. This condition lasts for 8 years already. Objectively, her body temperature is 37.8°C , she has fine punctate hemorrhages on her torso and limbs, ulnar deviation of the hands is observed. The borders of the heart are shifted to the left, a systolic murmur can be detected over the apex. Her pulse is 96/min. Her blood pressure is 170/100 mm Hg. Complete blood count shows the following: erythrocytes — $3.2 \cdot 10^{12}/\text{L}$, Hb — 108 g/L, leukocytes — $6.8 \cdot 10^9/\text{L}$, platelets — $220 \cdot 10^9/\text{L}$, ESR — 48 mm/hour, C-reactive protein (+++). General urinalysis shows the following: specific gravity — 1016, protein — 2.8 g/L, leukocytes — 10–12 in the vision field, erythrocytes — 2–4 in the vision field. What is the most likely diagnosis in this case?

- A. Rheumatoid arthritis
- B. Rheumatism
- C. Systemic lupus erythematosus
- D. Chronic glomerulonephritis
- E. Thrombocytopenic purpura

29. A four-month-old child suddenly became ill. The following symptoms has appeared: an increase of the body temperature to $38,5^{\circ}\text{C}$, one-time vomiting, lethargy. In 10 hours, on the buttocks and lower limbs appeared a rash in the form of petechie, spots and pustules. Some hemorrhagic elements are with necrosis in the center. What disease is most likely present in this child?

- A. Meningococemia
- B. Rubella
- C. Flu
- D. Hemorrhagic vasculitis
- E. Scarlet fever

30. A 19-year-old pregnant woman was hospitalized into the department of pregnancy pathology. Her term of gestation is 36 weeks, the fetus is large, with breech presentation. The woman has a severe form of diabetes mellitus. Cardiotocography detects fetal bradycardia of 90/min. No labor activity can be detected. What are the tactics of pregnancy management in this case?

- A. Urgent caesarean section
- B. Childbirth through the natural birth canal
- C. Labor stimulation
- D. Breech extraction
- E. Continuation of pregnancy

31. A food poisoning occurred in a canteen, affecting 15 people. The clinical presentation of the poisoning indicates its staphylococcal etiology. What biological materials, obtained from the patients, must be sent for laboratory testing to confirm food poisoning?

- A. Vomitus
- B. Blood for hemoculture
- C. Blood for clinical analysis
- D. Urine for clinical analysis
- E. Saliva

32. A 25-year-old woman was hospitalized at 11 weeks of pregnancy with complaints of pain in her lower abdomen. Two weeks ago she had a severe case of rubella. Bimanual examination detects a formed cervix, the cervical inlet is closed, the uterus is enlarged up to 11 weeks of pregnancy, the uterine appendages are normal. What treatment tactics would be optimal in this case?

- A. Termination of pregnancy
- B. Prolongation of pregnancy
- C. Minor caesarean section
- D. Administration of antispasmodics
- E. Administration of uterotonics

33. A three-year-old boy has been suffering from stool retention since birth. Every 3–4 days, the mother gives her child enemas. The boy lags behind his peers in physical development. Objectively, he has pale skin and distended abdomen. What disease can be suspected in this child?

- A. Hirschsprung's disease
- B. Coprostitis
- C. Helminthiasis
- D. Peritonitis
- E. Intestinal tumor

34. A 19-year-old patient complains of a dry cough, muscle pain, and a fever of 39°C. A sore throat and subfebrile body temperature were observed for the last week. Objectively, the respiration is harsh. Complete blood count shows the following: leukocytes — $10.0 \cdot 10^9/L$, leukocyte left shift, ESR — 26 mm/hour. Chest X-ray shows an intensified pulmonary pattern, low-intensity focal shadows in the lower segments of the right lung. What medicines should be prescribed in this case?

- A. Penicillin antibiotics
- B. Macrolides
- C. Second or third generation cephalosporins
- D. Aminoglycosides
- E. Sulfanilamides

35. A person has been hospitalized with the diagnosis of trichinellosis. What food product is the likely cause of this helminthiasis?

- A. Pork
- B. Beef
- C. Rabbit
- D. Mutton
- E. Poultry

36. A 3-year-old boy has been hospitalized with severe edemas. Objectively, the boy is pale, his blood pressure is 90/60 mm Hg, he has oliguria. General urinalysis shows the following: color — yellow, specific gravity — 1020, protein levels — 3.5 g/L, erythrocytes — leached, 4–5 in the vision field, leukocytes — 2–3 in the vision field, 24-hour proteinuria — 6.6 g. The cholesterol levels are 9.8 mmol/L. What next step in the patient's management would be optimal?

- A. Kidney biopsy
- B. Nechiporenko urine test
- C. Computed tomography without contrast
- D. Monitoring throughout the next week
- E. Zimnitsky test

37. An 18-year-old young man came to a doctor with complaints of cramping abdominal pain, frequent liquid stools with mucus and fresh blood. The symptoms have been observed for the last four months, during which the patient lost 10 kg. Physical examination shows soft abdomen, painful on the left along the

large intestine; the sigmoid colon is spastic. Complete blood count shows the following: erythrocytes — $3.2 \cdot 10^{12}/L$, hemoglobin — 92 g/L, leukocytes — $10.6 \cdot 10^9/L$, ESR — 34 mm/hour. Bacteriological culture of feces shows negative results. Colonoscopy revealed inflammation of the large intestine with the loss of vascular pattern, as well as an area of increased bleeding with clear boundaries. What treatment tactics should be chosen for this patient?

- A.** Prescription of prednisolone and mesalamine (mesalazine)
- B.** Prescription of metronidazole
- C.** Surgical treatment
- D.** Transfusion of packed red blood cells
- E.** Repeated collection of a stool sample for bacteriological testing

38. A 42-year-old man complains of weakness, palpitations, nosebleeds, and skin hemorrhages. His condition progressively deteriorates throughout the last month. Objectively, his condition is severe, he has petechial and spotted hemorrhages on the skin of his limbs and torso, lymph nodes and spleen are not palpable, the pulse is 116/min., the liver is +2 cm. Complete blood count reveals pancytopenia. What disease can be primarily suspected in this case?

- A.** Hypoplastic anemia
- B.** Acute leukemia
- C.** Werlhof disease
- D.** Hemorrhagic vasculitis
- E.** Acute agranulocytosis

39. A girl with the weight of 3100 g was born at home from her mother's third pregnancy. On the third day, the mother noticed small hemorrhages in the umbilical wound, as well as "red dots" on the sclera of the child's eyes. The mother was not registered for prenatal care checkups. She is breastfeeding her baby as needed. Physical examination detects subconjunctival hemorrhages. Laboratory testing revealed that the hemoglobin levels were 155 g/L, the mother's blood group was B(III) Rh-positive, while the child's blood group was A(II) Rh-negative. What is the optimal tactics to prevent the progression of this condition in the child?

- A.** Administration of vitamin *K*
- B.** Transfusion of packed red blood cells
- C.** Administration of human antirhesus Rh0(D) immunoglobulin
- D.** Prescription of iron preparations to be taken orally
- E.** Transition to formula-feeding with iron-fortified formulas

40. A 48-year-old patient complains of frequent constricting retrosternal pain that radiates into the left shoulder and left scapula. Pain attacks occur at night, at complete rest, and last 10–15 minutes. During the visit to a polyclinic, no ECG abnormalities and no changes in the patient's general condition were detected. What examination would be most important for clarification of the diagnosis?

- A.** Holter ECG monitoring
- B.** Bicycle ergometry
- C.** Catheterization of cardiac chambers
- D.** Echocardiography
- E.** Repeat ECG in a week

41. A 63-year-old man came to a doctor with complaints of marked general weakness, poor appetite, weight loss, joint pain, and heaviness in the right subcostal area. Complete blood count shows the following: erythrocytes — $3.4 \cdot 10^{12}/L$, Hb — 102 g/L, color index — 0.9, platelets — $640 \cdot 10^9/L$, leukocytes — $138 \cdot 10^9/L$, blasts — 1 %, promyelocytes — 2 %, myelocytes — 13 %, juvenile — 12 %, band neutrophils — 16 %, segmented neutrophils — 31 %, basophils — 3 %, eosinophils — 8 %, lymphocytes — 9 %, monocytes — 5 %, ESR — 30 mm/hour. What is the provisional diagnosis?

- A.** Chronic myeloid leukemia
- B.** Acute leukemia
- C.** Leukemoid reaction
- D.** Erythremia (polycythemia vera)
- E.** Chronic lymphocytic leukemia

42. A 54-year-old man was hospitalized with complaints of general weakness, fever of 38.6°C, shortness of breath during significant physical exertion, and frequent nosebleeds. He works in production of plastics, where he comes into contact with aromatic compounds. Objectively, his skin is pale and dry. Complete blood count shows the following: erythrocytes — $2.1 \cdot 10^{12}/L$, Hb — 90 g/L, leukocytes — $2.2 \cdot 10^9/L$, eosinophils — 1 %, band neutrophils — 1 %, segmented neutrophils — 75 %, lymphocytes — 20 %, myelocytes — 3 %, platelets — $30 \cdot 10^9/L$, ESR —

32 mm/hours. What is the most likely diagnosis in this case?

- A. Chronic benzene intoxication
- B. Chronic nitrobenzene intoxication
- C. Chronic tetraethyllead intoxication
- D. Chronic lead intoxication
- E. Chronic aniline intoxication

43. One week ago, a 68-year-old woman suddenly developed pain in the left half of her chest and shortness of breath. Objectively, the following is observed: cyanosis, distended neck veins, pulse — 100/min., blood pressure — 110/70 mm Hg, respiratory rate — 28/min., liver +4 cm, the left lower leg is edematous and sharply painful to palpation. Auscultation detects a dull lung sound on the left, below the scapula; sonorous moist fine vesicular crackles are present; the borders of the heart are expanded on the right; the II heart sound is accentuated over the pulmonary artery. ECG shows deep S waves in leads I and aVL, as well as deep Q waves in leads III and aVF, and a negative T wave in leads III and aVF. What is the most likely diagnosis in this case?

- A. Thromboembolism of pulmonary artery branches
- B. Croupous pneumonia
- C. Pericarditis
- D. Myocardial infarction
- E. Pleurisy

44. Among the population living near a pesticide production factory, the number of congenital malformations that manifest as central paralysis, idiocy, and blindness of newborns is dynamically increasing. Compounds of what chemical substance can cause the development of these pathologies?

- A. Mercury
- B. Strontium
- C. Cadmium
- D. Iron
- E. Chrome

45. An 18-year-old adolescent was diagnosed with a duodenal ulcer for the first time. The test for *Helicobacter pylori* is positive, the pH of gastric juice is 1.0. What would be the optimal treatment plan in this case?

- A. Clarithromycin + omeprazole
- B. Quamatel (famotidine) + amoxicillin
- C. De-nol (bismuth subcitrate) + trichopol (metronidazole)
- D. Omeprazole + oxacillin
- E. De-nol (bismuth subcitrate) + cimetidine

46. A 27-year-old man came to a doctor with complaints of pain and swelling in his toes II and III on the left foot, redness of the eyes and purulent discharge from them, and painful urination. Patient history taking revealed that the patient has several sexual partners and rarely uses condoms. Physical examination revealed bilateral conjunctivitis and dactylitis of the toes. Blood test shows ESR of 40 mm/hour. X-ray of the toes detects an increase in the volume of soft tissues and joint space narrowing. What is the most likely diagnosis in this case?

- A. Reactive arthritis
- B. Syphilis
- C. Rheumatoid arthritis
- D. Gonorrhea
- E. Gout

47. A 45-year-old man complains of an intense retrosternal pain that radiates into the lower jaw and occurs at rest, at night, several times for 10–15 minutes. During a pain attack, an elevation of the ST segment can be recorded on the ECG in leads V 3–4. What is the provisional diagnosis in this case?

- A. Prinzmetal angina pectoris
- B. Myocardial infarction
- C. Stable angina pectoris, functional class II
- D. Progressive angina pectoris
- E. Stable angina pectoris, functional class IV

48. Two weeks after a case of tonsillitis, a 29-year-old patient noticed facial edema, weakness, and decreased work capacity. Gradually, he developed shortness of breath, leg edema, and lumbar edema. Objectively, his skin is pale, his heart sounds are weakened, he has hydrothorax, anasarca, and blood pressure of 150/100 mm Hg. Clinical urinalysis shows the following: specific gravity — 1021, protein — 9 g/L, erythrocytes 40–50 in the vision field, hyaline casts — 4–6 in the vision field. What is the provisional diagnosis in this case?

- A. Acute glomerulonephritis
- B. Exacerbation of chronic glomerulonephritis
- C. Acute pyelonephritis
- D. Heart failure
- E. Myxedema

49. A 49-year-old man complains of angina pectoris attacks that occur when he walks up to 500 m. He has a many-year-long history of chronic bronchitis. Examination detects a small number of dry diffuse crackles in the lungs, the respiratory rate is 18/min. The borders of the heart are expanded to the left, the heart sounds are muffled, the heart rate=PS=86/min., the blood pressure is 160/100 mm Hg. Complete blood count shows the following: Hb — 160 g/L, leukocytes — $6.4 \cdot 10^9/L$, ESR — 7 mm/hour. ECG shows hypertrophy of the left ventricle. What group of drugs is contraindicated in this case, taking into account the concomitant pathology?

- A. Beta blockers
- B. Calcium antagonists
- C. Long-acting nitrates
- D. Angioprotectors
- E. Antiplatelet drugs

50. The pregnancy is first, the term of gestation is 38 weeks. The fetus is in the longitudinal lie, the presentation is cephalic, with the head pressed against the entrance to the lesser pelvis. The expected weight of the fetus is 3500.0 g. Contractions occur every 5 minutes and last for 25–30 seconds. The fetal heartbeat is 130/min., clear and rhythmic. Vaginal examination shows that the cervix is shortened to 1 cm, the cervical canal allows inserting 1 finger width (2 cm). The amniotic sac is intact. What labor management tactics should be chosen in this case?

- A. Manage the birth through the natural birth canal
- B. Tocolytic therapy
- C. Amniotomy
- D. Caesarean section
- E. Stimulation of labor activity

51. A man complains of red and sore skin on his right calf. Objectively, his body temperature is $38.5^{\circ}C$; his inguinal lymph nodes on the right are enlarged and painful; the skin is red, with clear boundaries between the redness and healthy skin; edema is observed; there are vesicles filled with a dark liquid; palpation is painful. What is the provisional diagnosis in this case?

- A. Erysipelas
- B. Cutaneous anthrax
- C. Herpetic infection
- D. Varicella
- E. Phlegmon of the leg

52. A 2-year-old child suffers from frequent and long-lasting respiratory diseases and pancreatogenic malabsorption. Mucoviscidosis (cystic fibrosis) is suspected. What study is necessary to confirm this diagnosis?

- A. Sweat chloride test
- B. Bronchoscopy
- C. Immunogram
- D. Chest X-ray
- E. Karyotyping

53. Examination of a victim of a traffic accident detects cyanosis and problems with breathing. The patient is in a severe condition, the right half of the chest lags behind in the act of breathing, the intercostal spaces are widened on the right, a bandbox resonance is observed during percussion, breathing cannot be heard during auscultation. What is the most likely diagnosis in this case?

- A. Valvular pneumothorax
- B. Open pneumothorax
- C. Pneumoperitoneum
- D. Acute purulent pleurisy
- E. Total hemothorax on the right

54. During preventive medical examination of middle and high school students, doctors were determining, whether the biological development of children matches their calendar age. For this purpose, the doctors were using the following criteria: annual increase in body length, ossification of hand bones, number of permanent teeth. What additional developmental indicator should the doctors include, when examining children at this age?

- A. Development of secondary sexual characteristics
- B. Body weight
- C. Chest circumference
- D. Vital capacity of the lungs
- E. Hand muscle strength

55. For intensive infusion therapy, a patient with acute respiratory failure underwent subclavian vein catheterization using the Seldinger technique. After administration of 600 mL of the infusion solution, the patient's condition sharply deteriorated, tachypnea increased from 26/min. to 40/min., tidal volume decreased from

400 mL to 250 mL. Auscultation detects sharply weakened respiration on the right. Percussion detects a dull sound. What complication developed in this patient?

- A. Hydrothorax
- B. Pulmonary edema
- C. Cerebral edema
- D. Pulmonary embolism
- E. Acute heart failure

56. 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 provisional diagnosis in this case?

- A. Urethral trauma
- B. Bladder trauma
- C. Reflex urinary retention
- D. Acute kidney failure
- E. Perineal hematoma

57. A 28-year-old woman came to a doctor with complaints of a sharp pain in her lower abdomen and a short-term loss of consciousness at home. The last menstruation was 12 days ago. Vaginal examination shows that her uterus is of normal shape and painless; the appendages on the left are slightly enlarged and painful to palpation; the posterior fornix is overhanging, tense, and sharply painful. What is the provisional diagnosis in this case?

- A. Apoplexy of the right ovary
- B. Ectopic pregnancy
- C. Pedicle torsion in a cyst
- D. Exacerbation of chronic adnexitis
- E. Right-sided pyosalpinx

58. A boy suffering from bronchial asthma started to experience suffocation attacks several times a day. During the last attack, inhalation of astmopent (orciprenaline) had no effect. Intensive therapy was unable to stop the attack. The child was transferred into the intensive care unit with the diagnosis of II degree status asthmaticus. What was the leading mechanism of the development of this condition in the child?

- A. Complete refractoriness (blockade) of beta-2-adrenoceptors
- B. Increased secretion of bioactive substances by mast cells
- C. Edema of the bronchial mucosa
- D. Inflammation of the bronchial mucosa
- E. Spasm of the bronchial smooth muscles

59. A 26-year-old woman complains of cramping abdominal pain, diarrhea with a significant amount of mucus and blood, and fever of 37.5–38.0°C. Objectively, her skin and mucosa are pale, the body type is asthenic. Palpation detects pain along the large intestine. Colonofibroscopy reveals edematous wall of the rectum and sigmoid colon, erosions, small ulcers, and mucus with blood in the lumen. What is the likely diagnosis in this case?

- A. Nonspecific ulcerative colitis
- B. Chronic enteritis
- C. Cancer of the large intestine
- D. Crohn's disease
- E. Dysentery

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

61. A pregnant woman at 38 weeks of pregnancy was hospitalized into the maternity hospital with complaints of a small amount of bloody discharge from the genital tracts and a sharp pain in her entire abdomen that started one hour ago. No labor activity can be detected. Objectively, the patient is pale, her pulse is 100/min., her blood pressure is 100/60 mm Hg, no fetal heartbeat. Palpation detects tense and painful uterus. Make the diagnosis.

- A. Placental abruption
- B. Uterine rupture
- C. Acute kidney failure
- D. Intranatal fetal death
- E. Placenta previa

62. A 22-year-old pregnant woman

was hospitalized in a severe condition. Throughout the past three days, she developed edemas, headache, nausea, and one episode of vomiting. Objectively, her consciousness is clouded, her blood pressure is 160/130 mm Hg. She presents with small fibrillar twitching of the facial muscles and problems with nasal breathing. During transportation, the woman's arms started twitching, her body stretched out, her spine curved, her jaws tightly clenched, and she stopped breathing. Then she developed clonic seizures and marked cyanosis. After that, the seizures stopped, a deep noisy inhale occurred, and blood-stained foam appeared on the patient's lips. What is the most likely diagnosis in this case?

- A. Eclampsia
- B. Epilepsy
- C. Chorea
- D. Hypertensive crisis
- E. Diabetic coma

63. On day 3 of life, a newborn presented with a deformation, edema, and hematoma of soft tissues in the left supraclavicular region. The arm is pressed to the torso, passive movements are accompanied by fussiness of the child. What is the likely diagnosis in this case?

- A. Displaced fracture of the left clavicle
- B. Non-displaced subperiosteal fracture of the left clavicle
- C. Erb's palsy
- D. Phlegmon of the newborn
- E. Osteomyelitis of the left clavicle

64. After the extraction of the second molar, the patient's body temperature increased. He developed pharyngeal pain on the left, infiltration, hyperemia of the lower part of the anterior palatine arch, and displacement of a tonsil towards the midline and upwards. Regional lymph nodes are painful to palpation. The otolaryngologist diagnosed the patient with paratonsillar abscess. What is the route of infection spread in this case?

- A. Odontogenic
- B. Lymphogenic
- C. Hematogenous
- D. Tonsilogenic
- E. Entry of a foreign body

65. A 27-year-old patient developed a fever of 38.7°C, lumbar pain, weakness, and headache after an overexposure to cold. Examination detects a positive Pasternacki sign (costovertebral angle tenderness) on

the left. General urinalysis detects pyuria and bacteriuria. What is the most likely diagnosis in this case?

- A. Acute pyelonephritis
- B. Acute cystitis
- C. Acute glomerulonephritis
- D. Paranephric abscess
- E. Renal colic

66. A 24-year-old woman complains of a papular rash on her external genitalia. The rash is painless, without itching, clearly separated from the healthy skin. Two months ago, a round ulcer with a hard smooth bottom located on the patient's labia majora disappeared on its own without a treatment. What is the likely diagnosis in this case?

- A. Secondary syphilis
- B. Measles
- C. Toxidermia
- D. Typhus
- E. Pityriasis versicolor

67. A 36-year-old patient complains of suffocation attacks with predominantly problematic exhalation. The attacks occur up to 2–3 times a day and can be relieved by inhalation of β_2 -adrenomimetics. 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 prolonged exhalation. Laboratory analysis of sputum detects numerous eosinophils, Charcot-Leyden crystals, and Curschmann spirals. What is the provisional diagnosis in this case?

- A. Bronchial asthma
- B. Chronic obstructive bronchitis
- C. Spontaneous pneumothorax
- D. Cardiac asthma
- E. Carcinoid syndrome

68. A man was repairing a fence and injured his right elbow with a wire. Three days later he developed edema, hyperemia, reduced range of movements in the joint, intense pain, and local and general increase of temperature. Objectively, the right elbow is enlarged, the skin over it is edematous and hyperemic; regional lymph nodes are enlarged, thickened, and painful. Palpation of the right elbow detects sharp pain and fluctuation. Make the provisional diagnosis.

- A. Bursitis
- B. Erysipelas
- C. Hidradenitis
- D. Abscess
- E. Lymphadenitis

69. A 40-year-old man complains of impaired vision, rapid heartbeat, and an aching pain in the muscles of his back, lumbar region, and legs and in his shoulder and hip joints. Objectively, the signs of uveitis can be observed. X-ray detects blurring of the contours of the sacroiliac joints and single syndesmophytes between the vertebral bodies. Laboratory testing detects antibodies against HLA-B27 antigens, anemia, and ESR of 28 mm/hour. What disease causes such a clinical presentation?

- A. Ankylosing spondylitis
- B. Reiter's syndrome
- C. Rheumatoid arthritis
- D. Systemic lupus erythematosus
- E. Deforming spondyloarthritis

70. 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 and small ulcers on the fingertips, Raynaud's syndrome, telangiectasia. What disease is the cause of such a clinical presentation?

- A. Systemic scleroderma
- B. Systemic lupus erythematosus
- C. Rheumatoid arthritis
- D. Dermatomyositis
- E. Raynaud's disease

71. A 26-year-old pregnant woman was hospitalized into the intensive care unit at 36 weeks of her pregnancy with complaints of an intense headache in the frontal region. Physical examination detected the following: blood pressure — 170/90 mm Hg, pulse — 85/min., respiratory rate — 15/min., body temperature — 36.9°C, edema of the limbs, fetal heart rate — 159/min. During the examination, the woman developed an attack of generalized tonic-clonic seizures. What drug must be administered first in this case?

- A. Magnesium sulfate
- B. Diazepam
- C. Phenytoin
- D. Sodium valproate
- E. Lamotrigine

72. After falling and hitting the back of the

head, a child lost hearing in the right ear and developed peripheral paralysis of the right facial nerve, discharge of a clear fluid from the right auditory canal, and diffuse neurological symptoms. Make the provisional diagnosis.

- A. Cerebral contusion, basilar skull fracture
- B. Concussion
- C. Cerebral contusion, subarachnoid hemorrhage
- D. Post-traumatic meningoencephalitis
- E. Meningoencephalitis

73. The patient, a chemical plant worker, while working with an aggressive liquid, accidentally spilled it on his overalls, receiving a chemical burn on his right thigh and lower leg. After removing his clothes, the following was revealed: on the front inner surface of the right thigh and the front surface of the right lower leg with a transition to the dorsum of the foot, there are yellow-gray patches with fragments of epidermis in some places. The affected skin areas exhibit tactile and painful hypoesthesia. What emergency aid must be provided first in this case?

- A. Rinse the lesions under running water
- B. Apply ethyl alcohol
- C. Apply baking soda solution
- D. Dress the lesions with aseptically bandages
- E. Dress the lesions with oil bandages

74. A 46-year-old man came to a doctor with complaints of a rash on his hands that appeared one week ago and is accompanied by severe itching. The patient has a history of bronchial asthma and has seasonal allergies. Physical examination detects dry skin of the hands and multiple erythematous papules and vesicles with serous contents, as well as areas of lichenification and excoriation, on the back of both hands. What is the most likely diagnosis in this case?

- A. Eczema
- B. Psoriasis
- C. Contact dermatitis
- D. Seborrheic dermatitis
- E. Scabies

75. Forensic examination of the body of a baby detects the following: weight — 3500 g, body length — 50 cm, the umbilical cord is smooth, moist, shiny, without signs of drying, lung float tests are positive. What is indicated by the results of the lung float tests in this case?

- A. The child was born alive
- B. The child was born dead
- C. Primary atelectasis
- D. Secondary atelectasis
- E. Hyaline membrane disease

76. During preventive medical examination, one of the students at a technical lyceum shows signs of cheilosis that manifests as maceration of the epithelium in the place where the lips close. The lips are bright red, with isolated vertical fissures covered in red-brown scabs. These clinical signs are most likely caused by the insufficient intake of a certain substance with food. Name this substance.

- A. Riboflavin
- B. Ascorbic acid
- C. Retinol
- D. Thiamine
- E. Calciferols

77. A full-term girl with chronic fetoplacental insufficiency was born from the second pregnancy that risked termination at 25–27 weeks. During the childbirth, the umbilical cord was revealed to be wrapped once around the neck of the baby, the extraction of the shoulders was difficult. After the birth, the Apgar scale was used to evaluate the baby's condition at the first minute of life: no breathing, the heart rate of 50/min., total cyanosis, atony, areflexia. What would be the Apgar score in this case?

- A. 1 point
- B. 2 points
- C. 3 points
- D. 4 points
- E. 0 points

78. A 55-year-old woman complains of diarrhea, irritability, and peeling and pigmentation of the open areas of her body (neck, hands, and feet). Her history indicates that 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. Pellagra
- B. Scurvy
- C. Beriberi
- D. Biotin-responsive dermatosis
- E. Psoriasis

79. A person diagnosed with a urogenital chlamydial infection based on the clinical manifestations and laboratory examination data has made an appointment with a venereologist. What will be the main

component of the therapy prescribed for this patient?

- A. Macrolide antibiotics
- B. Cycloferon or other immunomodulators
- C. Sulfonamides
- D. Penicillin antibiotics
- E. Drugs of the tinidazole group

80. A 25-year-old pregnant woman complains of fever of 38.5°C that lasts for two days already, cough, and shortness of breath. She developed these complaints after an overexposure to cold. Auscultation detects crepitation and localized moist crackles in the lower part of the right lung. Percussion detects there a dull sound. Complete blood count shows the following: leukocytes — $11.0 \cdot 10^9/\text{L}$, ESR — 22 mm/hour. What antibacterial agent must be prescribed In this case?

- A. Amoxicillin
- B. Levofloxacin
- C. Amikacin
- D. Doxycycline
- E. Carbenicillin

81. A patient was hospitalized into the neurosurgery department with a closed craniocerebral injury, a fracture of the right temporal bone. Five hours later, the patient's condition sharply deteriorated, he developed respiratory disorders, periodical tonic seizures, and anisocoria (dilation of the right pupil). What complication can be suspected in this case?

- A. Epidural hematoma
- B. Brain abscess
- C. Subarachnoid hemorrhage
- D. Characteristics associated with the course of concussion
- E. Ischemic stroke in the area of the right cerebral peduncle

82. A 20-year-old woman has been developing rhinitis and conjunctivitis in August-September for the last 8 years. The last year during this period, attacks of bronchial asthma started occurring as well. Skin testing detects hypersensitivity to *Ambrosia* pollen. The antibodies that cause the exacerbation of this condition belong to the following class of immunoglobulins:

- A. Immunoglobulin E
- B. Immunoglobulin G
- C. Immunoglobulin A
- D. Immunoglobulin M
- E. Immunoglobulin D

83. A 40-year-old woman has been sufferi-

ng from epilepsy since she was 15. Generalized epileptic seizures occur 2–3 times a month at night and are accompanied by involuntary urination and defecation. After a psychotrauma (her father's death), the attacks became more frequent and now occur every 2–3 minutes. The woman does not return to consciousness between the attacks, her pupils are unresponsive to light. What is the most likely diagnosis in this case?

- A. Status epilepticus
- B. Hysterical attack
- C. An increase in the number of grand mal seizures
- D. Absence seizure
- E. Epileptic psychosis

84. A 30-year-old woman came to a doctor with complaints of milk discharge from her breasts and no menstruation for the last 5 months. She had one physiological childbirth four years ago. The development of her breasts is normal. Bimanual examination detects a reduced in size uterus and normal size of the ovaries. MRI detects no cerebral pathology. Thyrotropin levels are within the normal range, prolactin levels in blood serum are elevated. What is the most likely diagnosis in this case?

- A. Hyperprolactinemia
- B. Hypothyroidism
- C. Polycystic ovary syndrome
- D. Pituitary adenoma
- E. Sheehan syndrome

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

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

86. A 20-year-old woman is being treated for anemia (hemoglobin — 72 g/L). A year and a half ago, she had an involuntary miscarriage with a significant blood loss at 16 weeks of pregnancy, after which the woman developed memory deterioration, fatigability, loss of appetite, dry skin, bri-

ttle nails, and irregular menstrual cycles. Objectively, the following is observed: blood pressure — 80/55 mm Hg, pulse — 54/min., height — 168 cm, weight — 48 kg, genital hypoplasia. What medicine would be the optimal choice for this patient?

- A. Hydrocortisone
- B. Hydroxychloroquine
- C. Methotrexate
- D. Human normal immunoglobulin
- E. Infliximab

87. 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 II heart sound is accentuated over the aorta. Complete blood count 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 provisional diagnosis in this case?

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

88. A 65-year-old woman came to a doctor with complaints of weakness in her left limbs. The weakness appeared in the morning and was gradually increasing throughout the day. Objectively, her consciousness is clear, her blood pressure is 190/100 mm Hg, her heart rate is 80/min., rhythmic, a systolic murmur can be detected on the neck in the projection of the bifurcation of the right common carotid artery. Examination of the neurological status detects a smoothed-out nasolabial fold on the left, deviation of the tongue to the left, a decrease in the muscle strength of the left limbs to 3 points, tendon reflexes are S>D, the Babinski sign is positive on the left, left-sided hemihypesthesia is observed. What is the most likely diagnosis in this case?

- A. Ischemic stroke
- B. Hemorrhagic stroke
- C. Acute hypertensive encephalopathy
- D. Dyscirculatory encephalopathy
- E. Multiple sclerosis

89. A 72-year-old patient came to a doctor with complaints of hand tremors, sti-

ffness, slowness of walking and speech, and difficulties in performing routine household chores. Physical examination detects general bradykinesia, hypomimia, emprosthotonus, "shuffling" gait, hand tremors at rest, D>S, plastic type of increased muscle tone, the "cogwheel rigidity" phenomenon, and marked postural instability. What medicines must be a primary part of the treatment regimen for this patient?

- A. Medicines containing levodopa
- B. Anticholinesterase drugs
- C. Anticholinergic agents
- D. Antidepressants
- E. Medicines that improve microcirculation

90. Within several days, a person developed a reduction in the peripheral vision, resembling a flap, on the outer side. The patient does not know the cause of this condition. The eye is calm, the optical media are transparent. On the nasal side of eye, ophthalmoscopy detects a gray "sail" with vessels that wavers during eye movements. The optic disc and blood vessels are without changes. What is the most likely diagnosis in this case?

- A. Retinal detachment
- B. Vascular pathology of the retina
- C. Initial signs of glaucoma
- D. Hemianopsia with a neurological pathology
- E. Lens subluxation

91. A 14-year-old girl developed morning fever, cheilitis, stomatitis, photosensitivity, leukocytosis of $24 \cdot 10^9/L$, and thrombocytopenia. Laboratory studies detect antinuclear antibodies in a high titer. Make the provisional diagnosis.

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

92. A 64-year-old man is undergoing outpatient treatment for ischemic heart disease, diffuse cardiosclerosis, persistent atrial fibrillation, and functional class III heart failure. The pharmacotherapy consists of cordarone (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 optimal control of the effectiveness and safety of the anticoagulant therapy?

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

93. A 62-year-old man complains of constant pain in the epigastrium and weight loss of 12 kg. Physical and instrumental examinations (fibrogastroscopy with biopsy, abdominal ultrasound, and chest X-ray) detected cancer of the body of the stomach without signs of distant metastasis. Histology reveals moderately differentiated adenocarcinoma. What scope of surgical intervention is advised in this case?

- A. Gastrectomy
- B. Proximal subtotal gastric resection
- C. Distal subtotal gastric resection
- D. Ivor Lewis procedure
- E. Gastroenteroanastomosis (gastroenteric bypass)

94. A 38-year-old woman made an appointment with a doctor. During her visit she talks a lot, speaks quickly, and rapidly switches from topic to topic, which makes it difficult to understand her speech. The patient cannot sit still on the chair, gesticulates, suddenly starts singing, laughing, reciting poems. She thinks she is "the healthiest" and "the happiest" and claims that "everyone envies her good looks and beautiful voice". According to her relatives, she has not been sleeping at night for the past 5 days and her appetite has increased. Three years ago, she was treated by a psychiatrist for depression. What syndrome is most likely in this patient?

- A. Manic syndrome
- B. Depressive syndrome
- C. Twilight state
- D. Attention deficit hyperactivity disorder
- E. Delirium

95. A 64-year-old man came to a doctor with complaints of edemas of the legs, lower back, and anterior abdominal wall. He has a history of chronic bronchitis with bronchiectasis. Physical examination shows the following: body temperature — $37.2^{\circ}C$, blood pressure — 110/75 mm Hg, pulse — 82/min., respiratory rate — 19/min. General urinalysis results are as follows: specific gravity — 1025, protein — 9.9 g/L, leukocytes — 2–3 in the vision field, erythrocytes — 1–2 in the vision field, no casts. Daily proteinuria is 11.4 g per 24 hours. Blood biochemistry test shows the

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

96. What is the type of joint action, where the overall effect on the human body is less than the sum of the individual effects of each separate substance included in the combination?

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

97. A woman with polycystic kidney disease observes an increase in her 24-hour urine output to 2–2.5 liters. Dynamic nephroscintigraphy shows the following: total glomerular filtration rate — 34 mL/min., serum creatinine — 84 μmol/L, urea — 8.0 mmol/L. What stage of chronic kidney failure is it?

- A. Compensated
- B. Latent
- C. Polyuric
- D. Intermittent
- E. Terminal

98. A 36-year-old man came to a doctor with complaints of burning retrosternal pain that usually occurs 1–1.5 hours after eating and becomes worse in a horizontal position. Esophagogastroduodenoscopy (EGD test) detects two lesion foci in the lower third of the esophageal mucosa. The foci are up to 5 mm in size and located within one fold. What tactics would be optimal in this case?

- A. Prescription of proton pump inhibitors
- B. Prescription of non-narcotic analgesics
- C. Prescription of clarithromycin
- D. Surgical treatment
- E. Monitoring in the inpatient department

99. A 42-year-old man, a miner, was freed after 12 hours spent under the rubble. Objectively, his both lower legs and feet are pale; there is no pulsation on the peripheral vessels, no sensitivity, and no passive movements in the joints. He was hospitalized with tourniquets applied to both

limbs. What urgent first aid must be provided in this case to prevent myoglobinuria and acute kidney failure?

- A. Do not remove the tourniquets, amputate the limbs above the tourniquets
- B. Remove the tourniquets, provide hyperbaric oxygenation
- C. Do not remove the tourniquets, provide hyperbaric oxygenation
- D. Do not remove the tourniquets, provide detoxification therapy
- E. Remove the tourniquets, provide detoxification therapy

100. A 45-year-old man came to a doctor complaining of a sore throat and fever that last for ten days. The patient has a history of ulcerative colitis, is a smoker, and has been smoking one pack of cigarettes per day for ten years. The patient's father died of cancer of the large intestine at the age of 50. Physical examination shows the following: body temperature — 38.6°C, blood pressure — 130/80 mm Hg, pulse — 72/min., respiratory rate — 18/min. Examination of the oral cavity reveals erythematous pharynx and exudate in the tonsillar crypts. Antigen test for group A streptococcus was positive. What procedure that doctor can recommend for secondary prevention of cancer would be optimal for this patient?

- A. Colonoscopy
- B. Fecal occult blood test
- C. Flexible sigmoidoscopy
- D. Low-dose CT scan of the lungs
- E. PSA test and digital rectal examination

101. A 52-year-old woman came to a doctor for her annual preventive checkup. Her father has a history of cardiovascular disease. Physical examination of the woman shows the following: height — 172 cm, weight — 77 kg, BMI — 26 kg/m², body temperature — 36.8°C, pulse — 81/min., respiratory rate — 16/min., blood pressure — 160/100 mm Hg on both hands. Ophthalmoscopy of the fundus detects narrowing of the retinal vessels. Laboratory values are within the normal range. What should be prescribed in this case to reduce the patient's risk of death caused by cardiovascular diseases?

- A. Enalapril
- B. Aspirin
- C. Warfarin
- D. Dipyridamole
- E. Nitroglycerin

102. A 22-year-old young man came to a doctor with complaints of fever and cough with yellow sputum. These symptoms have been observed for the last seven days. Physical examination shows the following: body temperature — 38.3°C , blood pressure — 130/70 mm Hg, heart rate — 79/min., respiratory rate — 17/min., SpO_2 — 95 %. Auscultation detects moist crackles on the left. Survey X-ray of the chest reveals left lower lobe consolidations. What drug should be prescribed to the patient in this case?

- A. Azithromycin
- B. Trimethoprim/sulfamethoxazole
- C. Ciprofloxacin
- D. Gentamicin
- E. Levofloxacin

103. A 7-year-old boy after a fall from a height presents with rapid and shallow breathing and cyanotic face. The right half of his chest takes no part in the act of breathing. Percussion detects tympanitis in this region, while auscultation detects no breathing there. What pathology is the most likely cause of this clinical presentation? What instrumental examination would be the most informative in this case?

- A. Right-sided tension pneumothorax. Survey X-ray of the chest
- B. Mediastinitis. Survey X-ray of the chest
- C. Tension cyst of the right lung. Tracheobronchoscopy
- D. Airway foreign body. Diagnostic and therapeutic bronchoscopy
- E. Right-sided hemothorax. Survey X-ray of the chest

104. Within 2–3 hours, a 58-year-old man developed multiple spots in his vision, after which the vision in his right eye darkened. Examination detects eccentric visual acuity of 0.02. The pupil is moderately dilated, its direct response to light is reduced. Ophthalmoscopy detects multiple hemorrhages of varying size and shape on the fundus of the eye ("squashed tomato" sign), the optic disc is edematous and hyperemic. The patient has a history of essential hypertension of II B degree. What is the most likely diagnosis in this case?

- A. Thrombosis of the central retinal vein
- B. Hypertensive angiopathy
- C. Hypertensive angioneuropathy
- D. Embolism of the central retinal artery
- E. Diabetic retinopathy

105. After semolina was introduced into

the diet, a 1-year-old child for 2 months has been presenting with loss of appetite, irritability, loss of body mass, and copious and foul-smelling stools. The skin is pale and dry, the hair is brittle. The abdomen is distended, while the limbs are thin. Stool test shows high levels of fatty acids. What is the most likely diagnosis in this case?

- A. Celiac disease
- B. Mucoviscidosis
- C. Lactase deficiency
- D. Functional diarrhea
- E. Irritable bowel syndrome

106. A 30-year-old woman complains of 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 amenorrhea in this case?

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

107. A 65-year-old patient was prescribed pharmacotherapy (ramipril, atorvastatin, amlodipine, acetylsalicylic acid, bisoprolol) for essential hypertension with concomitant ischemic heart disease. Two weeks later, he consulted a doctor about a dry cough. Examination detects no signs of acute respiratory viral infection or damage to the bronchopulmonary apparatus. A side effect of ramipril is suspected. What drug can be used to replace ramipril in the treatment plan?

- A. Valsartan
- B. Torasemide
- C. Nebivolol
- D. Enalapril
- E. Nifedipine

108. A 45-year-old patient was referred for a consultation with a psychiatrist due to complaints of abdominal pain and discomfort that occur in emotionally straining situations. Objectively, no changes of the gastrointestinal tract were detected. The complaints first arose over 10 years ago against the background of a severe alcohol poisoning. The patient has been repeatedly visiting gastroenterologists, who were unable to find any gastrointestinal pathology in the patient. The prescribed therapy was ineffective. What condi-

on is most likely in the patient?

- A. Somatoform autonomic dysfunction
- B. Functional dyspepsia
- C. Chronic alcoholism
- D. Organic brain disorder
- E. Depressive disorder

109. A 16-year-old boy developed dizziness. Objectively, his heart rate is 35/min., his blood pressure is 85/45 mm Hg, the heart borders are not enlarged, the heart sounds are loud and clear. ECG shows P waves disconnected from QRS complexes, dissociation and different rhythm of atria and ventricles are accompanied by varying location of P wave in relation to QRST complex. This presentation is most characteristic of the following disease:

- A. Complete atrioventricular block (III degree)
- B. Atrioventricular block (II degree)
- C. Atrioventricular dissociation
- D. Extrasystole
- E. Sinus bradycardia

110. A 45-year-old man with a history of myocardial infarction developed a brief attack of palpitations, accompanied by the sensations of lack of air, fear, and vertigo. His blood pressure is 90/60 mm Hg. ECG during the attack shows extended QRS complex (0.13 seconds) with the heart rate of 160/min., discordant shift of ST segment and T wave, dissociation of atrial and ventricular rhythm. What disturbance of cardiac rhythm is it?

- A. Paroxysmal ventricular tachycardia
- B. Paroxysmal supraventricular tachycardia
- C. Ventricular fibrillation
- D. Atrial fibrillation
- E. Frequent ventricular extrasystoles

111. A newborn boy was brought into a hospital on the second day after the onset of the disease. His parents complain of his fussiness, regurgitation, fever of 38.5°C, red skin with infiltration in the area of his lower back. Objectively, the child is in a severe condition, inert, pale, suckles poorly. In the lumbar region, on the sacrum, and on the buttocks there is an infiltration with hyperemic areas and a soft spot 8x7 cm in its center. The stool is 10 times per 24 hours with green coloring and mucus. What is the most likely diagnosis in this case?

- A. Phlegmon of the newborn
- B. Adiponecrosis
- C. Erysipelas
- D. Hemangioma
- E. Congenital soft-tissue tumor

112. A 55-year-old woman came to a doctor with complaints of thyroid enlargement that could be observed throughout the last 2 years and a discomfort during swallowing. Objectively, she has signs of hypothyroidism. The thyroid gland on palpation is dense, non-fused with the surrounding tissues and mobile during swallowing. The regional lymph nodes are not enlarged. Laboratory testing detects antithyroid antibodies in the blood serum. What is the most likely diagnosis in this case?

- A. Hashimoto's thyroiditis
- B. Thyroid cancer
- C. Acute thyroiditis
- D. Endemic goiter
- E. Midline cervical cyst

113. A 65-year-old man with acute anterior myocardial infarction developed an asphyxia attack. Examination detects diffuse cyanosis. His heart rate is 100/min. His blood pressure is 120/100 mm Hg. Auscultation detects numerous heterogeneous moist crackles in the lungs. What complication has developed in this patient?

- A. Pulmonary edema
- B. Cardiogenic shock
- C. Pulmonary embolism
- D. Ventricular septal rupture
- E. Hypertensive crisis

114. A 54-year-old woman came to her family physician for a preventive checkup. Objectively, the following is observed: height — 164 cm, weight — 84 kg, blood pressure — 130/80 mm Hg. The patient's history indicates the menopause for 5 years. The patient's mother died of breast cancer, the patient's younger sister suffers from mastopathy. Examination detects no lumps in the patient's breasts, the organs of her lesser pelvis are within the age norm. Her cervical cytology results are normal. What advice can be given to this woman?

- A. Undergo a mammogram once a year
- B. Regularly perform breast self-exam
- C. Undergo regular checkups every 3 months
- D. Undergo the next regular checkup in 2 years
- E. Undergo an MRI of the breasts

115. In a 70-year-old woman, chest fluorography shows a shadow of a heterogeneous structure over the left dome of the diaphragm. X-ray with contrast detects the abdominal segment of the esophagus in the chest cavity. What is the most likely diagnosis in this case?

- A. Hiatal hernia
- B. Benign esophageal tumor
- C. Achalasia cardia
- D. Esophageal diverticulum
- E. Esophagitis

116. For 12 hours, a woodcutter has been working outdoors in windy weather at the air temperature of +4–5°C. His shoes were compressing the distal parts of his feet. Now he complains of a pricking and burning pain in his toes 1–3 on both feet, pain in the interphalangeal joints, and decreased skin sensitivity in toes 1–3. Examination detects slightly edematous toes, bluish skin, painful and reduced movements in the interphalangeal joints, slightly reduced skin sensitivity, and retained pulsation of the arteries on the dorsum of the feet. What is the provisional diagnosis in this case?

- A. First degree frostbite
- B. Crush syndrome
- C. Critical ischemia of the feet
- D. Acute interphalangeal joint arthritis
- E. Obliterating endarteritis

117. A 35-year-old man was found dead in his own garage. Forensic examination detects the following: horizontal closed strangulation mark, petechial hemorrhages on the skin of the head and neck, facial cyanosis, marked livor mortis, and multiple Tardieu spots. What indicates that the man did not die by hanging?

- A. Horizontal strangulation mark
- B. Petechial hemorrhages on the skin
- C. Multiple Tardieu spots
- D. Marked livor mortis
- E. Facial cyanosis

118. Forensic autopsy of the body of a 59-year-old man, who died suddenly at home without signs of violent death, shows pink skin and mucosa, liquid bright-red blood, and bright-red plethoric internal organs. Forensic toxicology blood testing detected 1.44 ‰ of ethanol in the blood and carboxyhemoglobin levels of 55 %. What is the cause of death in this case?

- A. Carbon monoxide poisoning
- B. Alcohol poisoning
- C. Potassium cyanide poisoning
- D. Aniline poisoning
- E. Arsenic poisoning

119. A 32-year-old patient suffers from epilepsy. Suddenly, without any cause, the patient became excited. Objectively, the patient is disoriented in the personal identity and environment, has visual and auditory hallucinations of threatening content and delusional ideas of reference and persecution. There are expressions of fear, anger, and rage on the patient's face. The patient's behavior is aggressive, accompanied by destructive actions. What psychopathological syndrome is it?

- A. Twilight state
- B. Delirium syndrome
- C. Manic syndrome
- D. Hebephrenic syndrome
- E. Paranoid syndrome

120. A 58-year-old man had a moderate ischemic stroke in the right hemisphere of the brain 10 days ago. At the time of hospitalization, the deficit score on the NIHSS scale was 9 points. He suffers from moderate arterial hypertension, atrial fibrillation, urolithiasis, and gout (remission). What must be prescribed to the patient for secondary prevention of stroke?

- A. Oral anticoagulants (warfarin or NOACs – dabigatran, rivaroxaban, apixaban)
- B. Aspirin, 100 mg per day
- C. Clopidogrel, 75 mg per day
- D. High doses of lipid-lowering agents (e.g., atorvastatin – 80 mg per day)
- E. Drugs that improve cerebral blood flow

121. A 14-year-old girl is being examined by a pediatrician. Objectively, she has a tall stature, asthenic body type, striae on the skin of the abdomen, blue sclera. She was diagnosed with a scoliotic posture and chest deformity. She has hypermobile joints, her fingers and arms are long. Cardiac ultrasound visualizes a mitral valve prolapse. What is the most likely cause of her tall stature?

- A. Marfan syndrome
- B. Klinefelter syndrome
- C. Noonan syndrome
- D. Ehlers-Danlos syndrome
- E. Williams syndrome

122. A patient complains of pain in the lower back, weakness in the right foot, and impaired walking. Examination reveals

painful palpation of lumbar paravertebral points. Cough impulse sign is positive. The Lasegue sign is positive on the right at the angle of 70° . The Achilles reflex on the right is absent. There is weakness in the extensor muscles of the right foot, the patient has problems with standing on the right heel. The patient was diagnosed with lumbosacral radiculitis and right foot paresis. What group of medicines must be prescribed in this case?

- A. Nonsteroidal anti-inflammatory drugs
- B. Analgesics
- C. Vitamins
- D. Nootropics
- E. Anticholinesterases

123. A premature newborn boy (pregnancy 5, birth 1, gestation term — 27 weeks) has irregular respiration of $<30/\text{min}$. after birth and SpO_2 of 70 %. Retractions of the pliable areas of the chest and expiratory groaning are observed. Without oxygen support, generalized cyanosis occurs. Auscultation reveals crepitus in the basal segments. There are no data on the prevention of respiratory distress syndrome in the baby. What treatment tactics must be chosen in this case?

- A. Administer the surfactant preparation intratracheally within the first 15 minutes after birth
- B. Provide oxygen therapy using an oxygen tent
- C. Provide artificial pulmonary ventilation with an Ambu bag and a mask
- D. Administer the surfactant preparation intratracheally 2 hours after birth
- E. Prescribe an antibacterial therapy

124. For three weeks, a 29-year-old patient has been observing a painless ulcer on the skin of the vermilion border of the lower lip. The last week, the ulcer became accompanied by significant edema of the underlying and surrounding tissues. Examination shows an ulcer up to 2.5–3 cm in diameter, with clear margins, the bottom that resembles "old lard" in color, and an underlying cartilaginous infiltrate. What laboratory test must be prescribed first in this case?

- A. *Treponema pallidum* test
- B. Skin scraping for mycosis
- C. Smear for acantholytic cells
- D. Eosinophil count
- E. Bacterial culture

125. On the fourth day of life, a healthy newborn child developed melena and

started vomiting blood. Coagulogram reveals prolonged prothrombin time, decreased prothrombin index, and deficiency of plasma factors II, VII, IX, and X. What is the most likely disease in this case?

- A. Hemorrhagic disease of the newborn
- B. Hemophilia A
- C. Hemolytic disease of the newborn
- D. Neonatal sepsis
- E. Disseminated intravascular coagulation syndrome

126. A 31-year-old woman came to a gynecologist with complaints of a menstruation delay of 2 weeks, morning sickness, and smearing bloody discharge from the vagina. The pregnancy test was positive. Ultrasound detects no fertile egg in the uterine cavity. In this case, the patient must be referred for the following study:

- A. Dynamics of hCG levels in blood
- B. hCG level in blood
- C. Progesterone blood level
- D. PAPP + hCG levels in blood
- E. Magnetic resonance imaging

127. Preventive examination of the population of one of the Ukrainian cities detected spotted tooth enamel and generalized osteosclerosis with calcification of the intervertebral ligaments in 25 % of the residents. What is the most likely cause of these symptoms?

- A. Excessive fluorine levels in water
- B. Insufficient fluorine levels in soil and water
- C. Insufficient fluorine intake with tea
- D. Excessive fluorine levels in vegetable products
- E. Insufficient fluorine levels in animal products

128. A patient with epilepsy suddenly developed status epilepticus with generalized seizures after self-discontinuation of antiepileptic drugs. What are the first-line drugs for the treatment of this condition?

- A. Diazepam, lorazepam, midazolam
- B. Gabapentin, pregabalin, ethosuximide
- C. Topiramate, oxcarbazepine, carbamazepine
- D. Doxepin, amitriptyline, mianserin
- E. Levomepromazine, clozapine, quetiapine

129. Approximately 40 % of patients with bacterial pneumonia develop concomitant pleural effusion. This diagnosis can be confirmed by chest X-ray in the direct

vertical projection, if there is at least:

- A. 300 mL of liquid
- B. 500 mL of liquid
- C. 100 mL of liquid
- D. 200 mL of liquid
- E. —

130. After eating mushrooms, a 30-year-old person developed nausea, vomiting, and absence of urination. On the third day after the onset of the symptoms, this person sought medical aid. Laboratory tests show elevated creatinine levels of 700 $\mu\text{mol/L}$ and urea levels of 32 mmol/L . What treatment tactics should be chosen in this case?

- A. Hemodialysis
- B. Diuretics
- C. Antidote therapy
- D. Detoxification therapy
- E. Peritoneal dialysis

131. A 38-year-old pregnant woman, gravida 2, gestation term of 23–24 weeks, has type 2 diabetes mellitus, for which she receives metformin in the dose of 2500 mg per 24 hours. Laboratory analysis detects glycated hemoglobin (HbA_{1c}) levels of 7.2%. What further treatment strategy should be chosen for this patient?

- A. Prescribe insulin therapy and discontinue metformin
- B. Increase the dose of metformin to 3000 mg per 24 hours
- C. Add GLP-1 analogues to metformin
- D. Discontinue metformin and switch to sulfonylureas
- E. Continue the treatment unchanged

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

133. A woman complains of frequent and copious foamy stools without pathological admixtures, cramp-like pain in her periumbilical region, rumbling in the stomach, and fever. From her history, it is known that she was eating soft-boiled duck eggs. What is the most likely causative agent of her condition?

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

134. A 37-year-old patient was repeatedly treated in a psychiatric hospital. The current hospitalization was due to behavioral disorders in the form of reticence, refusal to eat, periodical chaotic excitement with stereotyped movements. During the examination, the patient is sluggish, remains in bed, and no contact with him can be made. He does not answer any questions, his position is monotonous, he is hypomimic. The "proboscis" sign, the waxy flexibility of the muscles, and the "psychological pillow" sign are observed. This condition lasts for a week already. What is the provisional diagnosis in this case?

- A. Catatonic schizophrenia
- B. Schizophrenia with paranoia
- C. Simple-type schizophrenia
- D. Hebephrenic schizophrenia
- E. Reactive stupor

135. A 46-year-old patient complains of double vision and drooping of the eyelids that occur mainly in the second half of the day and almost completely disappear after a rest. Examination detects slight bilateral ptosis, reduced lateral movement of the eyeballs, diplopia, and positive proserin (neostigmine) test. Make the diagnosis.

- A. Myasthenia
- B. Progressive supranuclear ophthalmoplegia
- C. Oculopharyngeal muscular dystrophy
- D. Olivopontocerebellar atrophy
- E. Kearns-Sayre syndrome

136. A 14-year-old girl has short stature, broad shoulders, webbed neck, and no signs of puberty. Her intelligence is normal. Ultrasound of the lesser pelvis shows hypoplasia of the uterus and the absence of ovaries. Karyotype of the child is 45, X0. What pathological syndrome can be suspected in this case?

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

137. Examination of a newborn girl detects a hemorrhage on the child's head. The hemorrhage is limited to one cranial bone,

does not pulsate, and is painless. What condition did the child develop?

- A. Cephalohematoma
- B. Physiological birth-related edema
- C. Intracranial birth injury
- D. Neonatal pemphigus
- E. Hydrocephalus

138. A 40-year-old man complains of a rash all over his body and slight itching. He has been ill for 3 months and associates his rash with a neuropsychiatric 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 will be the provisional diagnosis in this case?

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

139. The patient's son has filed a lawsuit after his mother died of breast cancer. Due to the fact that in the past she survived a stroke and had diabetes, aggressive cancer therapy was contraindicated for her. She was suffering from severe pain, but doctors at the outpatient clinic were unable to obtain even 1 mg of morphine for her treatment. What kind of care should have been provided in this case by the primary care doctors to relieve the patient's condition?

- A. Palliative medical care
- B. Secondary medical care
- C. Primary medical care
- D. Tertiary medical care
- E. Emergency medical care

140. Essential hypertension, as an important non-communicable disease, is the most common type of arterial hypertension, in which there is a persistent increase in blood pressure up to 140/90 mm Hg and which is influenced by exogenous and endogenous risk factors. What factors are endogenous?

- A. Age (over 40 years), sex, hereditary predisposition
- B. Excessive emotional and nervous strain
- C. Obesity
- D. Stress
- E. Sensitivity to weather changes

141. A worker at a workshop that produces car batteries came to a doctor with complaints of nausea, loss of appetite, sharp pain in the abdominal cavity,

and constipations. Examination reveals elevated blood pressure, bradycardia, an enlarged liver, pain in the right subcostal region, a grayish-blue stripe on the gums, and gray skin. Complete blood count indicates the presence of erythrocytes with basophilic stippling and reduced hemoglobin levels. Aminolevulinic acid and coproporphyrin can be detected in the patient's urine. What is the most likely provisional diagnosis in this case?

- A. Lead poisoning
- B. Food poisoning
- C. Cadmium poisoning
- D. Mercury poisoning
- E. Aluminum poisoning

142. An 18-year-old adolescent bought at a store a salad with smoked fish, mushrooms, and mayonnaise. Six hours after eating the salad, he developed progressive weakness, vision impairment, "fog in the eyes", and problems with swallowing. He was hospitalized. Examination detects the body temperature of 36.0°C and pale skin and mucosa. The patient is adynamic, answers questions sluggishly. The pupils are dilated, with reduced response to light. The patient's voice is hoarse, his oral mucosa is dry. What type of food poisoning can be suspected in this case?

- A. Botulism
- B. Salmonellosis
- C. Staphylococcal intoxication
- D. Mushroom poisoning
- E. Fish poisoning

143. After giving birth, a 25-year-old woman developed increased weakness in her legs and unsteady walking. 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. Multiple sclerosis
- B. Acute disseminated encephalomyelitis
- C. Amyotrophic lateral sclerosis
- D. Myasthenia gravis
- E. Dyscirculatory encephalopathy

144. It was found that for every 100 births, women with risk factors had 30 preterm bi-

rths, while women without risk factors had 5 preterm births. What statistical method of data processing would be optimal for a doctor to use to estimate the validity of differences between the groups that are being compared?

- A. Calculation of the Student's criterion
- B. Calculation of average values
- C. Calculation of relative values
- D. Standardization method
- E. Correlation analysis

145. A 34-year-old man fell ill 3 days ago after an overexposure to cold. He complains of a fever of 39.2°C, marked general weakness, sweating, and cough. The cough was initially dry, but within the last 24 hours a small amount of "rusty" sputum was produced. Objective examination detects herpes on the lips. Percussion reveals a dull sound in the lower pulmonary lobes. Auscultation detects bronchial breathing and tachycardia. No changes were detected in the organs of the abdominal cavity. What is the most likely diagnosis in this case?

- A. Croupous pneumonia
- B. Nosocomial pneumonia
- C. Community-acquired focal pneumonia
- D. Exudative pleurisy
- E. Lung abscess

146. A 26-year-old woman, who has been suffering from rheumatoid arthritis for 8 months, has edemas of her elbow, radiocarpal, knee, and ankle joints, and rheumatoid nodules in the area of her elbow joints. Complete blood count shows ESR of 57 mm/hour and C-reactive protein (+++). X-ray of the joints reveals marked osteoporosis. What medicine would be used as the basic therapy in this case?

- A. Methotrexate
- B. Infliximab
- C. Meloxicam
- D. Diclofenac sodium
- E. Methylprednisolone

147. A victim has a II–III degree burn injury that covers 15 % of the body surface. On day 20 after the injury, the patient presents with a sharp increase in the body temperature, general weakness, and frequent shallow respirations. The blood pressure is 90/50 mm Hg, the pulse

is 112/min. What complication can be suspected in this case?

- A. Sepsis
- B. Pneumonia
- C. Acute intoxication
- D. Purulent bronchitis
- E. Anaerobic infection

148. In recent months, a 29-year-old woman developed complaints of pain in her right iliac region, diarrhea with mucus and pus, pain in the hip joints, and periodic increases in body temperature. The abdomen during palpation is soft, with tenderness in the right iliac region. Irrigography shows that the mucosa resembles a "cobblestone pavement", the ileocecal junction is narrowed. What disease can be suspected in this case?

- A. Crohn's disease
- B. Whipple's disease
- C. Gluten enteropathy (celiac disease)
- D. Tuberculous ileotyphlitis
- E. Pseudomembranous enterocolitis

149. A 38-year-old patient complains of pain in the area of the metatarsophalangeal joints of toes 1–2 on the right foot. Examination detects bluish-purple skin over the affected joints that is hot to the touch. There are nodular formations covered with thin shiny skin in the area of the auricles. What drug must be prescribed for this patient as a part of the urate-lowering therapy?

- A. Allopurinol
- B. Colchicine
- C. Nimesulide
- D. Febuxostat
- E. Methotrexate

150. A 55-year-old woman complains of deformed finger joints and pain in them during movements. Objectively, there are small bony formations on the lateral surfaces of the distal interphalangeal joints. The formations are slightly painful to palpation. What are they called?

- A. Heberden's nodes
- B. Bouchard's nodes
- C. Tophi
- D. Rheumatoid nodules
- E. Erythema nodosum