

1. A 58-year-old woman came to the gynecological clinic. She complains of bloody discharge from her genital tracts. Menopause is 8 years. Gynecological examination: the uterus is slightly enlarged, dense to touch, with limited mobility; the uterine appendages cannot be detected; parametrium is free. Fractional curettage of the uterine cavity yields a significant amount of medullary substance in the scrape. What is the most likely diagnosis?

- a. Hormone-producing ovarian tumor
- b. Uterine cervix cancer
- c. Chorioepithelioma
- d. Uterine corpus cancer**
- e. Adenomyosis

2. A 44-year-old woman complains of general weakness, drowsiness, palpitations, dry skin, and reduced working ability. Objectively, she has normal-colored skin, pulse - 72/min., blood pressure - 125/80 mm Hg, the thyroid gland is diffusely enlarged to the II degree, dense, mobile, and painful. Ultrasound reveals decreased echogenicity, non-homogeneity of the echo structure, thickening of the gland capsule. Blood test shows that T4 levels are decreased, TSH levels are increased, and the levels of antibodies to thyroperoxidase and anti-microsomal antibodies are significantly increased. What is the most likely diagnosis in this case?

- a. Subacute thyroiditis
- b. Thyroid cancer
- c. Diffuse toxic goiter, II degree
- d. Diffuse euthyroid goiter, II degree
- e. Autoimmune thyroiditis**

3. During his visit to a doctor, the patient complained of pain in the joints. The patient's dietary history indicates that he prefers meat and fatty foods. After all the necessary examinations, the doctor diagnosed the patient with gout. What type of food products is recommended for the patient?

- a. Animal fats
- b. Legumes
- c. Offal
- d. Meat of young animals and poultry
- e. Dairy products**

4. A 53-year-old woman complains of an aching pain in her lower abdomen, a significant abdominal distension within the last 5 months, weight loss, and weakness. Objectively, the cervix is clean, the uterus is not enlarged, painless, and immobile. On the both sides, there are dense mildly mobile tumors 10x13 cm in size with an uneven surface. Abdominal percussion detects a fluctuation. Make the diagnosis:

- a. Endometriosis
- b. Floating kidney
- c. Uterine fibromyoma
- d. Tubo-ovarian tumor
- e. Ovarian cancer**

5. On the 15th day after a small trauma of the right foot, the patient developed indisposition, fatigability, irritability, headache, elevated body temperature, and sensation of constriction, tension, and twitching in the muscles of the right shin. What disease can be suspected?

- a. Acute thrombophlebitis
- b. Anaerobic gas gangrene
- c. Tetanus**
- d. Thrombophlebitis of the popliteal artery
- e. Erysipelas

6. A 28-year-old man periodically talks to himself. During the interview, it was discovered that the patient hears people's voices that, he claims, are broadcasted into his head using radio devices. The thoughts of these people are connected to his head and try to influence his behavior. The patient claims that all this happens to him because he has a special purpose in this life, and these voices try to correct his actions. What is the most likely diagnosis in this case?

- a. Manic syndrome
- b. Kandinsky-Clerambault syndrome**
- c. Paraphrenic syndrome
- d. Verbal hallucinosis
- e. Obsessive-compulsive disorder

7. A 46-year-old woman complains of pain attacks in the right lumbar area, which irradiate to the lower abdomen, and nausea. This kind of pain attacks has never been detected in the patient before. Survey X-ray of the abdominal cavity reveals no pathologic shadows. Ultrasonic scan detects a hyperechogenic growth 1,5 cm in diameter, which reflects sound wave, in the enlarged right renal pelvis. What diagnosis is most likely?

- a. Benign renal tumor
- b. Renal cyst
- c. Renal tuberculosis
- d. Renal calculus**
- e. Malignant renal tumor

8. 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. Catheterization of cardiac chambers
- c. Echocardiography
- d. Bicycle ergometry
- e. Repeat ECG in a week

9. A 74-year-old woman came to a doctor complaining of a pain in her right inguinal region. The signs appeared suddenly, approximately 2 hours ago. The woman notes that she already had these signs 3 weeks ago, but back then they disappeared on their own after she lay down. Objectively, palpation detects below the Poupart's ligament a sharply painful, dense, and tense formation 3.5 cm in diameter. The Dejerine sign (aggravation on coughing) is negative. What is the most likely diagnosis in this case?

- a. Acquired strangulated femoral hernia**
- b. Acquired incarcerated inguinal hernia
- c. Acquired incarcerated femoral hernia
- d. Acquired strangulated inguinal hernia
- e. Inguinal lymphadenitis

10. A 27-year-old woman at 39 weeks of her pregnancy was hospitalized with complaints of moderate bleeding from her genital tract and abdominal pain. According to the patient's medical history, the symptoms appeared one hour ago. Objectively, the uterine tone is increased, the uterus is painful in the area of its fundus. Ultrasound shows that the placenta is located near the uterine fundus and a retroplacental hematoma 6x7 cm in size can be visualized. Fetal heart rate - 190/min., muffled. What is the most likely diagnosis in this case?

- a. Uterine rupture
- b. Placental abruption**
- c. Hydatidiform mole
- d. Placenta previa
- e. Amniotic fluid embolism

11. A 73-year-old man against the background of acute transmural anterior myocardial infarction has developed a decrease in systolic pressure (70 mm Hg) and diuresis (100 mL per 24 hours) and an increase in blood creatinine (480 μmol/L). Proteinuria is observed in the urine (0.066 g per 24 hours). What is the cause of decreased diuresis?

- a. Acute renal failure
- b. Acute tubulointerstitial nephritis

c. Prerenal acute kidney injury

d. Rapidly progressive glomerulonephritis

e. Congested kidney

12. 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. Salmonellosis

b. Rotavirus infection

c. Acute appendicitis

d. Cholera

e. Shigellosis

13. 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. Conservative management of the delivery

b. Preparation of the cervix for preterm birth

c. Immediate delivery by caesarean section

d. Continuation of the intensive therapy

e. Labor induction

14. Four weeks after a myocardial infarction, a 52-year-old man developed an elevated body temperature and pain in the area of his heart, behind the sternum, and in the sides of his torso. The pain intensifies during breathing. A few days later, the patient developed arthralgias as well. Examination reveals pericarditis, pleurisy, and arthritis. Blood test shows leukocytosis and increased ESR. ECG revealed concordant elevation of the ST segment in standard leads. What is the most likely diagnosis in this case?

a. Sjogren's syndrome

b. Acute myocarditis

c. Dressler's syndrome

d. Recurrent myocardial infarction

e. Pulmonary thromboembolism

15. On the second day after overexposure to cold, a 19-year-old patient developed pain in the area of the kidneys, turbid urine, and a fever of 38.4°C . Complete blood count: leukocytes - $9.8 \cdot 10^9/\text{L}$. Urinalysis: protein - traces, erythrocytes - 2-3 in sight, leukocytes - all over the entire vision field. What is the most likely diagnosis in this case?

a. Renal tuberculosis

b. Systemic lupus erythematosus

c. Acute glomerulonephritis

d. Acute prostatitis

e. Acute pyelonephritis

16. The patient's respirations are 28/min., tachycardia is up to 100/min., there are signs of intoxication. In the area of the right scapula the percussion sound is dull, the respiration is bronchial, with single fine vesicular crackles and crepitation sounds. X-ray shows a massive inflammatory infiltration in the middle pulmonary field. Three days later, against the background of treatment, the patient developed a cough attack, during which he expectorated 200 mL of purulent sputum. After that his body temperature dropped to subfebrile values and his overall condition improved. At the level of the scapular angle, against the background of the pulmonary infiltration, there is a round area of radiolucency with the horizontal level of liquid. Make the diagnosis:

a. Right-sided bronchitis

b. Gangrene of the right lung

c. Multiple bronchiectasis

d. Pulmonary abscess

e. Pleural empyema

17. A 25-year-old woman has been hospitalized into the gynecology department with complaints of a fever of 38.5°C , pain in her lower abdomen, and purulent discharge from the vagina. She became acutely ill one week after an artificial abortion. Objectively, the following is observed: pulse - 100/min., blood pressure - 110/70 mm Hg, soft abdomen, painful in its lower regions. Gynecological examination detected the following: the uterus is enlarged, soft, and painful; the appendages are unchanged; the vaginal fornix is free. Discharge from the vagina is profuse and purulent. What is the most likely diagnosis in this case?

a. Pelvioperitonitis

b. Parametritis

c. Acute metroendometritis

d. Acute adnexitis

e. Lochiometra

18. A patient is being treated in the tuberculosis clinic. Throughout the last 3 weeks he has been suffering from headaches of increasing intensity. Neurological examination detects nuchal rigidity without focal signs. Make the provisional diagnosis:

a. Tuberculous meningitis

b. Brain tumor

c. Chorea minor

d. Myelitis

e. Convexital arachnoiditis

19. After the pregnant woman's waters broke, it was noted that they are significantly contaminated with meconium. Upon birth, the baby is not breathing, remains inert, the skin is cyanotic and covered in meconium, heart rate is 98/min. What resuscitation measures should be taken after the baby is born?

a. Tactile stimulation of the newborn

b. Give adrenaline intravenously

c. Direct laryngoscopy, intubation, sanation of the trachea

d. Artificial pulmonary ventilation with a mask and Ambu bag

e. Sanation of the upper respiratory tracts with a rubber balloon

20. A 42-year-old woman has been hospitalized with complaints of dull, aching pain in her lower back, more on the right side, and her body temperature sometimes increasing to subfebrile levels. The patient's medical history states that 10 years ago during pregnancy she had a pain attack in her lumbar region on the right and a fever of 39°C . She underwent treatment with antibiotics. In recent years, she was feeling satisfactory. An increase in blood pressure has been observed for the past 5 years. Urinalysis revealed the following: protein - 0.66 g/L, leukocytes - 10-15 in sight, erythrocytes - 2-3 in sight. What is the most likely diagnosis in this case?

a. Renal urolithiasis

b. Chronic glomerulonephritis

c. Chronic pyelonephritis

d. Renal tuberculosis

e. Essential hypertension

21. A 36-year-old woman complains of nausea, belching, liquid stool, and a pain in the epigastrium after meals. For the last 2 years the disease has been slowly progressing. Objectively, her skin is pale and dry, her tongue is coated, moist, and has imprints of the teeth on its edges. Abdominal palpation detects a diffuse pain in the epigastrium. What test will be the most informative in this case and should be conducted next?

a. Fibrogastroscopy with biopsy of the gastric mucosa

b. Abdominal CT scan

c. Fractional analysis of gastric secretion

d. Comprehensive complete blood count

e. Gastrointestinal X-ray

22. A woman has developed sudden thoracic pain on the right with expectoration of pink sputum and body temperature rise up to 37,7°C on the 4th day after the surgery for cystoma of the right ovary. On lung examination: dullness of the lung sound on the lower right is observed. Isolated moist crackles can be auscultated in the same area. What complication is the most likely?

- a. Pneumonia
- b. Exudative pleurisy
- c. Pneumothorax
- d. Pulmonary infarction**
- e. Pulmonary abscess

23. A 27-year-old pregnant woman (pregnancy II, 8-10 weeks) developed a fever. Examination for TORCH infections detected antibodies of the IgM type to herpes simplex virus types I and II. What should be recommended to the pregnant woman in this case?

- a. Termination of the pregnancy**
- b. Acyclovir treatment
- c. alpha-fetoprotein test
- d. Symptomatic treatment
- e. Continued monitoring

24. Examination of pork detected 2 trichinella in 24 sections on the compressorium. What should be done with this meat?

- a. Cut into small pieces and boiled
- b. Used to make sausages
- c. Deep frozen
- d. Used in public catering networks
- e. Technically utilized**

25. A 54-year-old man, a heavy drinker, who 4 years ago had a case of viral hepatitis B, has been experiencing heartburn and a burning pain retrosternal for the past two months. In the morning, after eating and lifting a heavy object, he had an episode of vomiting with fresh dark blood. Objectively, his skin is pale and moist, pulse - 92/min., blood pressure - 90/60 mm Hg. His sclerae are icteric. His abdomen is enlarged due to ascites and hepatosplenomegaly. What is the most likely cause of bleeding in this case?

- a. Peptic ulcer disease of the duodenum
- b. Budd-Chiari syndrome
- c. Mallory-Weiss syndrome
- d. Esophageal achalasia
- e. Ruptured varicose veins in the esophagus**

26. At the oligoanuric stage of acute renal failure, a 10-year-old child developed a tingling sensation in the tongue and oral mucosa, numbness of the limbs, decreased reflexes, respiratory disorders, and arrhythmia. What is the cause of these signs?

- a. Hyperazotemia
- b. Hyponatremia
- c. Alkalosis
- d. Hyperkalemia**
- e. Acidosis

27. A patient 1 year ago had a Q wave myocardial infarction of the posterior wall of the left ventricle. For the last 2 weeks he has been suffering from daily attacks of atrial fibrillation and bradycardia episodes, accompanied by bouts of vertigo. What tactics is the most advisable in this case?

- a. Prescription of procainamide
- b. Prescription of bisoprolol
- c. Prescription of digoxin
- d. Pacemaker implantation**
- e. Prescription of amiodarone

28. An ambulance was called to a 45-year-old man. According to his family, the onset of the disease

was sudden, after he returned from a ski resort. His body temperature increased up to 38.7°C , he developed headache and vomiting. Objectively, his skin is pale with a cyanotic tint, there is a thick hemorrhagic rash all over the body, sometimes with necrosis in the center. Blood pressure is 45/0 mm Hg, pulse is 126/min., low volume. The patient has marked nuchal rigidity and positive Kernig's sign. Make the provisional diagnosis:

- a. Poliomyelitis
- b. Meningococcal infection**

- c. Influenza
- d. Vesicular rickettsiosis
- e. Typhus

29. A 38-year-old woman complains of a tensive pain in her lower abdomen and the small of her back that is observed within the last month and intensifies on the day before menstruation. Premenstrual dark bloody discharge was observed. She has a history of four medical abortions and one birth. Ultrasound shows isolated foci of increased echogenicity in the myometrium, increased anteroposterior size of the uterus, and round hypoechogenic inclusions 2 mm in diameter. What is the most likely diagnosis in this case?

- a. Ovarian endometriosis
- b. Retrocervical endometriosis
- c. Hormone-producing ovarian tumor
- d. Chorioneopithelioma
- e. Adenomyosis**

30. A pregnant woman was registered with a maternity consultancy at the term of 11 weeks and was monitored throughout the whole normal course of her pregnancy. What document must be given by the doctor to this woman for hospitalization to a maternity clinic?

- a. Medical certificate issued by a sanitary and epidemiological station
- b. Personal medical record of the pregnant woman
- c. Hospitalization referral
- d. Temporary disability certificate

- e. Exchange medical record**

31. A 40-year-old patient presents with cough in the morning with production of mucopurulent sputum and elevated body temperature up to 37.6°C . He has been smoking since he was 17 years old. Objectively, auscultation detects coarse respirations and diffuse dry crackles in the lungs. Complete blood count: leukocytes - $12\cdot10^9/\text{L}$, ESR - 19 mm/hour. Bronchoscopy shows purulent catarrhal endobronchitis. Make the diagnosis:

- a. Chronic bronchitis**
- b. Lung cancer
- c. Bronchial asthma
- d. Pulmonary tuberculosis
- e. Community-acquired pneumonia

32. A 23-year-old woman, para 2, full term, is in labor. Her waters were clear and broke three hours ago. The labor activity is regular. The contractions last 25-30 seconds, with intervals of 4-5 minutes. The baby is in the longitudinal lie, cephalic presentation. The head is pressed to the entrance into the lesser pelvis. Fetal heart rate is 136/min. Internal examination shows that the cervix is smoothed out, the opening of the external orifice of uterus is 3 cm, no amniotic sac, the lower pole of the fetal head is at the level of empl. terminalis. What stage of labor is it?

- a. Preliminary stage
- b. Stage I of labor**
- c. Stage III of labor
- d. Stage II of labor
- e. Labor precursors

33. A 32-year-old woman presents with obesity (mostly her shoulders and torso are affected), hirsutism, and menstrual irregularities. She has purple-cyanotic striae and stretch marks on her shoulders, chest, abdomen, and thighs. What is the cause of striae development in this case?

- a. Hypoestrogenemia
- b. Overproduction of androgens
- c. Insulin resistance
- d. Hypergonadotropinemia
- e. Catabolic effect of corticosteroid excess**

34. A 30-year-old patient complains of itching skin. The itch has been observed throughout the last week and intensifies in the evening. Examination detects a polymorphic rash consisting of small paired vesicles, punctate papules, excoriations, and red-brown inflammatory papules on the lateral surfaces of the hands and fingers and on the usually covered areas of the body (abdomen, buttocks, genitals). What is the most likely diagnosis in this case?

- a. Pediculosis
- b. Scabies**
- c. Syphilis
- d. Candidiasis
- e. Psoriasis

35. A 26-year-old man has an external bleeding from a lacerated wound of the shin. Dark-red blood flows from the wound in a steady stream. The total blood loss is approximately 400 mL. What method should be used to stop the blood loss during the pre-admission stage?

- a. Apply an arterial tourniquet to the thigh
- b. Apply a tourniquet below the site of the bleeding
- c. Apply a tight bandage to the wound**
- d. Press the femoral artery with your finger
- e. Apply a clamp to the bleeding vessel

36. A 10-year-old boy came to the polyclinic with complaints of stuffy nose. It is known that these signs occur in the child periodically (in spring and autumn). He has a history of atopic dermatitis. The father of the child has bronchial asthma. Objectively, the boy's face is pale and slightly swollen. Respiration are 22/min. Auscultation detects vesicular respiration over the lungs. Rhinoscopy shows swollen and pale nasal mucosa. What disease can be suspected?

- a. Acute adenoiditis
- b. Acute rhinitis
- c. Allergic rhinitis**
- d. Recurrent respiratory disease
- e. Acute maxillary sinusitis

37. 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. Recurrent myocardial infarction
- b. Stable exertional angina pectoris, FC II
- c. Stable exertional angina pectoris, FC IV**
- d. Aortic aneurysm with aortic dissection
- e. Unstable angina pectoris

38. 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. Proximal subtotal gastric resection
- b. Gastroenteroanastomosis (gastroenteric bypass)
- c. Ivor Lewis procedure
- d. Gastrectomy**

e. Distal subtotal gastric resection

39. A child is 8 months old. One week ago the child had a case of acute viral respiratory infection. The child's physical and mental development corresponds with the age. There are complaints of inertness, loss of appetite, unmotivated recurrent vomiting, temperature up to 38°C within the last 24 hours, pallor, frequent urination with low urine output, tachycardia. Urinalysis: protein - 0.099g/L, leukocytes - 15-20 in the vision field, bacteriuria - +++, mucus - +++. What disease can be suspected?

- a. Dysmetabolic nephropathy
- b. Acute glomerulonephritis
- c. Deficient care
- d. Phosphate diabetes

e. Acute pyelonephritis

40. When investigating a case of mass poisoning, it was determined that the car mechanics, who tested diesel engines in a repair bay with a broken exhaust ventilation, at the end of their working day developed the following signs: headache, nausea, vomiting, tinnitus, labile pulse. Objectively, their skin and mucosa are cherry-red. What toxic factor has caused mass poisoning of the car mechanics?

- a. Nitrogen oxide
- b. Sulfur dioxide

c. Carbon monoxide

- d. Carbon disulfide
- e. Carbon dioxide

41. 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. Lichen ruber planus
- b. Pityriasis rosea Gibert
- c. Papular syphilid
- d. Seborrheic dermatitis

e. Disseminated psoriasis

42. Monthly dysentery morbidity in the region given in absolute figures is as follows: January - 6; February - 9; March - 11; April - 10; May - 16; June - 23; July - 19; August - 33; September - 58; October - 19; November - 11; December - 5. Annual total is 220 cases. What graphic presentation would provide the best visual for monthly deviations of dysentery morbidity from the average?

- a. Pie chart
- b. Radar chart**
- c. Bar chart
- d. Cartogram
- e. Map

43. A 28-year-old woman complains of weakness, dizziness, nosebleeds, and hemorrhages on her torso. The condition onset was 4 months ago. Objectively, her condition is of moderate severity. There are multicolored painless hemorrhages 1-2 cm in size on her back and abdomen. The peripheral lymph nodes are not enlarged. The liver is (-), the spleen is (+). Blood test shows the following: Hb - 120 g/L, erythrocytes - $3.4 \cdot 10^{12}/\text{L}$, color index - 0.9, reticulocytes - 0.9%, serum iron - 15.01 mcmol/L , leukocytes - $4.2 \cdot 10^9/\text{L}$, eosinophils - 2%, basophils - 0%, band neutrophils - 7%, segmented neutrophils - 40%, monocytes - 6%, lymphocytes - 45%, platelets - $47.1 \cdot 10^9/\text{L}$, ESR - 27 mm/hour. What is the most likely diagnosis in this case?

- a. Chronic iron-deficiency anemia
- b. Hypoplastic anemia
- c. Hemolytic anemia
- d. Chronic lymphocytic leukemia

e. Idiopathic thrombocytopenic purpura

44. A 12-year-old girl for two weeks presents with periodical body temperature elevations to 39°C, spindle-shaped swelling of the interphalangeal joints, pain in the upper chest and neck, and morning stiffness. What is the most likely diagnosis?

- a. Juvenile rheumatoid arthritis
- b. Rheumatism
- c. Toxic synovitis
- d. Osteoarthritis
- e. Septic arthritis

45. A 42-year-old man, a dispatcher, suffers from peptic ulcer disease of the duodenum. The disease is of moderate severity. He wants to be assigned a disability group. Make the conclusion regarding his working ability:

- a. Capable of working, non-employable
- b. Second group of disability
- c. Capable of working, employable
- d. First group of disability
- e. Third group of disability

46. 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. Primary medical care
- b. Tertiary medical care
- c. Secondary medical care
- d. Palliative medical care
- e. Emergency medical care

47. A 15-year-old boy complains of periodical headaches and fatigability. On examination, the boy is active, his psychoemotional development corresponds with his age, his skin is pale and clammy. No abnormalities of the internal organs were detected. Blood pressure is 120/80 mm Hg. Noticeable is the excessive subcutaneous fat that is evenly distributed throughout the body. The doctor suspects obesity in the child. What parameter should be measured first to confirm this diagnosis?

- a. Thickness of subcutaneous fat
- b. Body mass to height ratio
- c. Obesity of family members
- d. Body mass index
- e. Body mass

48. 40% of the workers, who polish the art glass, using an abrasive disk, and have a long record of employment, are diagnosed with ulnar neuritis, 21% - with vegetative polyneuritis, and 12% - with vegetomyofascitis of the upper limbs. These pathologies are associated with the following harmful factor:

- a. Vibration
- b. Noise
- c. Electromagnetic field
- d. Microclimate
- e. Dust

49. A 30-year-old pregnant woman complains of pain in her lower abdomen and mild bloody discharge from the genital tract, observed over the last 3 hours. Her last menstruation was 3 months ago. Vaginal examination detects the body of the uterus enlarged to 16 weeks of pregnancy, the external os allows inserting a fingertip, the discharge is bloody, in a small amount, contains small bubbles. Ultrasound shows a "snowstorm" pattern in the uterine cavity. What is the most likely diagnosis in this case?

- a. Hydatidiform mole
- b. Threatened spontaneous miscarriage

- c. Ongoing miscarriage
- d. Incomplete miscarriage
- e. Miscarriage that has started

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

- a. Rabbit
- b. Pork**
- c. Beef
- d. Mutton
- e. Poultry

51. A 32-year-old man has been hospitalized with fever episodes that are accompanied by excessive sweating and occur every 48 hours. Twelve years ago he was in military service in Tajikistan, where he had a case of malaria. Objectively, his sclerae are subicteric, his skin is pale, the liver is dense and enlarged by 2 cm, the spleen is enlarged by 5 cm. What test is necessary to clarify and confirm the diagnosis in this case?

- a. Serological blood test
- b. Microscopy of the thick drop and blood smear**
- c. Serum activity of ALT and AST enzymes
- d. Biochemical blood test
- e. Serum bilirubin levels

52. Indicators of work of inpatient departments in the city hospitals for the past year were analyzed. After that the meeting was held at the central city hospital and, based on the results of the analysis, a decision was made to decrease the number of beds in the inpatient departments, and instead open daycare units with partial hospitalization in the city polyclinics. What is the main goal of this decision?

- a. Decrease of the length of inpatient stay
- b. Rational use of the bed fund**
- c. Optimization of the average bed occupancy rate per year
- d. Intensification of the bed fund usage
- e. Decreased mortality during inpatient treatment

53. A 35-year-old woman complains of pain in her right lower leg. The pain intensifies during walking. Objectively, the skin on her right lower leg is red and hyperemic along the varicosity of the small saphenous vein. Palpation detects an oblong painful induration 3x2 cm in size in the upper third of the lower leg. What complication of varicose veins has developed in the patient?

- a. Thrombophlebitis**
- b. Lymphadenitis
- c. Furuncle
- d. Deep vein thrombosis
- e. Lymphangitis

54. You are a doctor on duty. A patient after a successful resuscitation (drowning) was delivered to an admission room. BP is 90/60 mm Hg, heart rate is 120/min., respiration rate is 26/min. The patient is unconscious, pupils are moderately dilated, general clonic and tonic convulsions are observed. Make the diagnosis:

- a. Vegetative state
- b. Unconsciousness
- c. Coma of unknown origin
- d. Postresuscitation disease**
- e. Apparent death

55. 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. Ampicillin

- c. Bicillin-1
- d. Oxacillin
- e. Erythromycin

56. A 35-year-old woman, a polisher, complains of chills, cold bluish fingertips, low mobility of her hand joints, and a contracted sensation in the skin of her face and hands. Examination detects amimia, pouch-like pursing of the mouth, thickened skin of cheeks and hands, pale and cold fingertips. A bandbox resonance and isolated fine inspiratory crackles can be heard over the lungs. Blood test shows the following: erythrocytes - $3.8 \cdot 10^{12}/L$, leukocytes - $4.8 \cdot 10^9/L$, ESR - 45 mm/hour. CRP ++. What is the most likely diagnosis in this case?

- a. Systemic scleroderma

- b. Myxedema
- c. Raynaud's disease
- d. Obliterating endarteritis of the extremities
- e. Vibration disease

57. A child is 10 years old. The weight is 46 kg. Since birth the child has been gaining excessive weight. The parents are full-bodied. The child has undergone the following tests: carbohydrate tolerance, level of 17-ketosteroids, blood electrolytes, US of adrenal glands, cranium X-ray. The tests revealed no pathologies. The diagnosis of exogenous constitutional obesity has been made. What direction of therapy should be prioritized?

- a. Dehydration therapy
- b. Sanatorium-and-spa treatment

- c. Reducing diet and exercise

- d. Anorectic drugs
- e. "Fat-burning" methods

58. A 27-year-old woman is in her second period of labor. Expected weight of the fetus - 4800 g. Objectively, the following is observed: fetal heart rate - 160/min., rhythmic, the pelvis dimensions are 25-28-30-20 cm, Wosten's sign is positive. Vaginal examination shows that the opening of the cervix is complete, there is no amniotic sac, the head is pressed to the entrance into the lesser pelvis, the promontory cannot be reached. What delivery tactics should be chosen in this case?

- a. Waiting tactics
- b. Drug induction of labor

- c. Cesarean section

- d. Vacuum extraction of the fetus
- e. Tocolytic therapy

59. When playing football, a 20-year-old man squatted sharply on his right leg with a simultaneous turn to the left. This movement resulted in a sharp pain in his right knee, after which he was brought to a first-aid station. Objectively, the range of movements in the right knee joint is $100-150^{\circ}$, there is no lateral mobility in the knee. Make the diagnosis:

- a. Damage to the medial collateral ligament
- b. Subluxation of the patella, possibly habitual
- c. Damage to the anterior cruciate ligament

- d. Damage to the internal meniscus

- e. Tense hemarthrosis of the knee joint

60. During analysis of morbidity in the city, it was determined that age structure of population is different in each district. What statistical method allows to exclude this factor, so that it would not skew the morbidity data?

- a. Analysis of average values
- b. Correlation-regression analysis

- c. Standardization

- d. Wilcoxon signed-rank test
- e. Dynamic time series analysis

61. A 42-year-old patient complains of acute spastic abdominal pain, nausea, vomiting with intestinal

contents, abdominal distension that decreases after vomiting, and gas retention. According to the patient's history, the disease onset was 4 hours ago. Objectively, the following is observed: pulse - 110/min, the tongue is dry and coated, the abdomen is asymmetrically distended - enlarged upper half, soft to palpation, painful. Auscultation detects active peristaltic sounds with metallic tinkling, splashing, and gurgling. What is the most likely diagnosis in this case?

- a. Acute cholecystitis
- b. Acute pancreatitis
- c. Nonspecific ulcerative colitis
- d. Perforated stomach ulcer
- e. Intestinal obstruction

62. A 55-year-old woman complains of thyroid gland enlargement that can 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 on swallowing. The regional lymph nodes are not enlarged. In the serum there are antithyroid antibodies detected. What is the most likely diagnosis?

- a. Hashimoto's thyroiditis
- b. Thyroid cancer
- c. Midline cervical cyst
- d. Endemic goiter
- e. Acute thyroiditis

63. A patient has made an appointment with his family doctor, because he needs to undergo a preventive examination before being hired to work at a chemical plant. What type of preventive examination is needed for this patient?

- a. Routine
- b. Targeted
- c. Preliminary (pre-placement)
- d. Periodical
- e. Comprehensive

64. A 13-year-old girl complains of an increase in her body temperature to 37.4°C throughout the last 2 months after a case of acute respiratory viral infection. During examination, the girl is thin and has exophthalmos, tachycardia, and diffuse enlargement of the thyroid gland of the II degree (dense to palpation). What pathological syndrome is observed in the patient?

- a. Thymomegaly
- b. Thyrotoxicosis
- c. Hypoparathyroidism
- d. Hypothyroidism
- e. Hyperparathyroidism

65. A 62-year-old woman undergoes treatment for bilateral gonarthrosis and has been regularly taking diclofenac sodium for 2 years. During the last six months she notes elevations of her blood pressure to 160/100 mm Hg. X-ray of the knee joints shows decreased height of the inter-articular space, marginal growths on the articular surfaces, and epiphyseal osteoporosis. General urinalysis shows the following: specific gravity - 1.010, erythrocytes - 5-6 in sight, leukocytes - 10-12 in sight, casts (cylinders) - 0-1 in sight, glucose - not detected, protein - 0.22 g/L. Fasting plasma glucose - 6.3 mmol/L. What is the most likely cause of the changes observed in the general urinalysis?

- a. Hypertensive nephropathy
- b. Tubulointerstitial nephritis
- c. Diabetic nephropathy
- d. Urolithiasis
- e. Chronic glomerulonephritis

66. A 15-year-old girl complains of the absence of menstruations and periodic pain in her vagina. Examination of the external genitalia detected the following: the girl has the female pattern of hair growth, the labia majora are normally developed and cover the labia minora, the entrance to the vagina is covered with a protruding bluish-purple septum. What is the most likely diagnosis in this

case?

- a. Hymenal atresia
- b. Ovarian dysfunction
- c. Genital infantilism
- d. Amenorrhea of unknown etiology
- e. Vulvar endometriosis

67. A 10-year-old boy was brought into the hospital with complaints of expiratory dyspnea, respirations are 30/min. He explains his state by a change in the weather conditions. For the last 4 years the boy has been registered for regular check-ups due to his diagnosis of third degree persistent bronchial asthma. To provide emergency aid for this child, first he needs to be given:

- a. Claritin (Loratadine)
- b. Adrenaline
- c. Dexamethasone
- d. Salbutamol or short-acting beta2-agonists**
- e. Euphylline (Aminophylline)

68. A 42-year-old woman complains of morning stiffness in the joints of her hands, a feeling of tightness in the skin of her face, and difficulty swallowing food. Objectively, she has facial amimia, her oral cavity has a "pouch-like" narrowing, her fingertips are pale and cold to the touch. Auscultation detects arrhythmic and weakened heart sounds and systolic murmur over the apex. Blood test revealed the following: erythrocytes - $3.2 \cdot 10^{12}/\text{L}$, leukocytes - $6.7 \cdot 10^9/\text{L}$, ESR - 35 mm/hour. What is the most likely diagnosis in this case?

- a. Rheumatism
- b. Systemic lupus erythematosus
- c. Scleroderma**
- d. Sjogren's syndrome
- e. Rheumatoid arthritis

69. A 22-day-old infant developed subcutaneous red nodes from 1.0 to 1.5 cm in size on the scalp; later the nodes suppurred. Temperature increased up to 37.7°C , intoxication symptoms appeared, regional lymph nodes enlarged. Complete blood count: anemia, leukocytosis, neutrocytosis, raised ESR. What diagnosis will you make?

- a. Scalp phlegmon
- b. Pemphigus
- c. Pseudofurunculosis**
- d. -
- e. Vesiculopustulosis

70. A 20-year-old man was hospitalized on the 9th day of the disease. He attributes his disease to eating of insufficiently thermally processed pork. At its onset this condition manifested as periorbital edemas and fever. Objectively his body temperature is 38.5°C . The face is puffy and the eyelids are markedly swollen. Palpation of gastrocnemius muscles is sharply painful. Blood test shows hypereosinophilia. What is the etiology of this disease?

- a. Trichinella**
- b. Trichuris
- c. Leptospira
- d. Echinococci
- e. Ascarididae

71. A 42-year-old patient complains of heartburn on an empty stomach, acidic burping, and periodic pain in the epigastrum that occurs more often at night and in the morning. The patient developed general weakness, palpitations, and dizziness, and later "coffee ground" vomiting. Complete blood count: hemoglobin - 92 g/L, leukocytes - $7.5 \cdot 10^9/\text{L}$, ESR - 22 mm/hour. What complication did the patient develop?

- a. Penetrating ulcer
- b. Ulcer malignancy
- c. Pyloric stenosis

d. Perforation of a duodenal ulcer

e. Gastrointestinal bleeding

72. One year ago an 8-year-old boy had a case of hepatitis B) For the last two months he has been complaining of fatigability, disturbed sleep, loss of appetite, and nausea, especially in the morning. His skin is not icteric, the liver and spleen are painless and can be palpated 1 cm below the costal margin. His ALT levels are 220 units. How can this condition be interpreted?

- a. Residual effects of hepatitis B
- b. Development of hepatic cirrhosis

c. Development of chronic hepatitis

- d. Recurrence of viral hepatitis B

- e. Biliary dyskinesia

73. A 32-year-old patient complains of excessive appetite, excess weight, dyspnea during physical exertion. There are fat deposits in the area of abdomen and shoulder girdle. The skin is pale-pink, adult male pattern of hair distribution is observed on the torso, no stretch marks. Heart rate is 90/min., BP is 120/80 mm Hg, body build index equals 35. Blood sugar is 4,9 mmol/l, cholesterol is 6,2 mmol/l. On ophthalmoscopy: fundus of the eye without changes. What provisional diagnosis can be made?

- a. Secondary hypothalamic obesity
 - b. Secondary endocrine hypo-ovarian obesity
 - c. Primary alimentary constitutive obesity, gynoid type
 - d. Secondary neuroendocrine obesity
- e. Primary alimentary constitutive obesity, android type

74. A 72-year-old man diagnosed with ischemic heart disease presents with diffuse cardiosclerosis, permanent tachysystolic atrial fibrillation, heart failure IIa, FC III. Objective examination of vital signs: blood pressure is 135/80 mm Hg, heart rate is 160/min., pulse is 125/min. Left ventricular ejection fraction is 32%. What drug is indicated in this case and should be prescribed to the patient?

- a. Digoxin
- b. Procainamide (Novocainamide)
- c. Verapamil
- d. Isadrine (Isoprenaline)
- e. Ivabradine

75. A 5-year-old child was brought to the ENT department by an ambulance. The child presents with cough and difficult respiration. From the patient's history it is known that the child was playing with a toy construction set, when suddenly started coughing and developed labored breathing. Examination detects periodical cough, labored expiration, and respiratory lag in the left side of the child's thorax. Auscultation: diminished respiration on the left. Percussion: tympanitis. X-ray shows a displacement of the mediastinal organs to the right. Make the diagnosis:

- a. A foreign body in the left bronchus, valvular bronchostenosis
- b. A foreign body in the trachea
- c. A foreign body in the left bronchus, complete bronchostenosis
- d. A foreign body in the right bronchus, valvular bronchostenosis
- e. A foreign body in the right bronchus, partial bronchostenosis

76. A 45-year-old woman complains of constant pain in her right iliac region and frequent urination. According to the patient's history, the disease onset was 12 hours ago. First she felt nausea and pain in her epigastric region. Five hours later the pain moved into the right iliac region. Objectively, the patient's condition is moderately severe, she lies on her right side with the legs pulled up to the stomach, body temperature - 37.9°C. The abdomen is symmetrical and not distended, during palpation there is tension and pain in the right iliac region. Rovsing, Blumberg, and Rosenstein (Sitkovsky) signs are positive. Rectal examination detects pain when pressing on the front wall of the rectum. What is the most likely diagnosis in this case?

- a. Acute adnexitis
- b. Acute appendicitis
- c. Appendicular abscess

- d. Appendicular infiltrate
- e. Acute cystitis

77. A 48-year-old woman has been suffering from chronic pancreatitis for the last 7 years. Lately she has been noticing an increase in daily feces with foul smell, abdominal distention, gurgling. The patient complains of diarrhea, weakness, fatigability, loss of appetite, loss of weight. What syndrome can be suspected in this case?

- a. Irritable colon
- b. Maldigestion
- c. Endocrine gland failure
- d. Exudative enteropathy

e. Malabsorption

78. A 38-year-old man complains of a spasmodic abdominal pain, frequent liquid stool with mucus and fresh blood admixtures. He has been suffering from this condition for 2 years, during which he has lost 12 kg. Objectively: Ps - 92/min., blood pressure - 100/70 mm Hg, body temperature - 37.4°C. The abdomen is soft and painful along the large intestine. The sigmoid colon is spastic. In the blood: erythrocytes - $3.2 \cdot 10^{12}/L$, Hb - 92 g/L, leukocytes - $10.6 \cdot 10^9/L$, ESR - 32 mm/hour. Irrigoscopv shows narrowing of the large intestine, no haustra, blurred margins, "lead-pipe" sign. What is the most likely diagnosis?

- a. Crohn's disease
- b. Gastric carcinoma
- c. Diverticular disease of the intestine

d. Ulcerative colitis

- e. Amoebic dysentery

79. During the study of several cases of botulism that occurred in one group of people (5 people fell ill), it was determined that the patients were eating various dishes, among which were several types of cheese, pork stew, fried potatoes, homemade salted fish, and salads from fresh vegetables. What food is the most likely cause of the disease?

- a. Salads
- b. Cheese
- c. Homemade salted fish**
- d. Pork stew
- e. Fried potatoes

80. A 30-year-old woman complains of sudden reddening of her right eye, photophobia, a feeling of sand in the eye, and lacrimation that appeared 3 days ago, as well as rhinitis and a fever of 38°C. Objectively, she has marked edema of the eyelids, hyperemia of the conjunctiva of transitional folds, and fine punctate hemorrhages in the conjunctiva of the upper eyelid. A small amount of mucopurulent secretion is observed. What is the most likely diagnosis in this case?

- a. Bacterial conjunctivitis of the right eye**
- b. Tuberculous conjunctivitis of the right eye
- c. Herpetic conjunctivitis of the right eye
- d. Allergic conjunctivitis of the right eye
- e. Adenoviral conjunctivitis of the right eye

81. Examination of a newborn detects the following: the right arm is extended at the elbow joint, pronated, passively lies along the trunk with the shoulder lowered and the wrist flexed. The muscle tone is reduced, tendon reflexes are absent, finger movements are preserved. Make the provisional diagnosis.

- a. Soft tissue injury of the shoulder
- b. Osteomyelitis of the humerus
- c. Complete paralysis of the limb

d. Erb-Duchenne palsy

- e. Klumpke paralysis

82. A 45-year-old man has been suffering from duodenal ulcer disease for 5 years. He complains of

weakness, dizziness, dryness of the skin. Objectively: the skin and visible mucosa are pale, chapped lips; heart rate is 100/min., BP- 100/70 mm Hg, systolic murmur at all points on heart auscultation. All other internal organs are unchanged. Fecal occult blood test is positive. Blood test: erythrocytes - 3,1·10¹²/l, Hb- 88 g/l, color index - 0,7, leukocytes - 4,6·10⁹/l, platelets - 350·10⁹/l, ESR- 21 mm/hour, anisocytosis, poikilocytemia, serum iron - 9,5 mcmol/l. What treatment tactics would you choose?

- a. Corticosteroids, cytostatics
- b. Intramuscular introduction of 500 mkg of cyanocobalamin
- c. Concentrated red cells transfusion
- d. Iron preparations, balanced diet**
- e. Ascorbic acid, calcium chloride

83. An 8-year-old boy received a hit to the head with a ball during a physical training lesson. Over the next few days he was complaining of headache and nausea and had three episodes of vomiting. His parents did not take him to a physician. Six months later, the parents and the teachers began to notice that the boy started experiencing episodes, when his face would become red and he would freeze for a few seconds, focusing his gaze on a single point. While in this state, the boy was not responding to people calling his name. What is the most likely diagnosis in this case?

- a. Attack of focal motor epilepsy
- b. Vago-insular paroxysm
- c. Syncopal state
- d. Atonic absence seizure
- e. Simple absence seizure**

84. A patient is 28 years old. He has been suffering from mental disorder since he was 22. His current condition has changed acutely: for 3 days the patient has been refusing to leave his home. He claims that there is a "telepathy" occurring between him and other people, through which he receives "thoughts of strangers" and transmits his own thoughts for everyone to hear. He thinks his thoughts and actions are manipulated through this "telepathy". Make the preliminary diagnosis:

- a. Manic episode
- b. Acute reaction to stress
- c. Organic delirium
- d. Depressive episode
- e. Paranoid schizophrenia**

85. A 40-year-old woman after an unsuccessful treatment by a neurologist was referred to a gynecologist. She complains of swollen breasts, depression intermittent with aggression, weakness, tearfulness, numb arms, and meteorism that appear 2-3 days before a menstruation and disappear after the menstruation is over. She considers herself ill for the last 2 years. Gynecological examination detects no pathologic changes in her genitals. She was diagnosed with premenstrual syndrome. What clinical form of premenstrual syndrome is the most likely in this case?

- a. Crisis
- b. Neuropsychic**
- c. Edematous
- d. Cephalgic
- e. Mixed

86. A 25-year-old woman was brought into the gynecological department with profuse bloody discharge from her genital tracts. She is 12 weeks pregnant, the pregnancy is planned. Within the last 3 days she was experiencing pains in her lower abdomen that eventually started resembling cramps, she developed bleeding. Her skin is pale, pulse - 88/min., blood pressure - 100/60 mm Hg, body temperature - 36.8°C. Vaginal examination: the uterus size corresponds with 11 weeks of pregnancy, the cervical canal allows inserting 1 finger and contains fragments of the fertilized ovum, the discharge is bloody and profuse. What is the most likely diagnosis?

- a. Disturbed menstrual cycle, amenorrhea
- b. Disturbed menstrual cycle, hyperpolymenorrhea
- c. 12-week pregnancy, spontaneous abortion in progress**

- d. Full-term pregnancy, term labor
- e. 12-week pregnancy, threatened spontaneous abortion

87. A 35-year-old woman complains of pain in her left arm that progresses over the last 4 months and intensifies after physical exertion of the affected limb. Additionally, she notes a cold and <<tingling>> sensation in her arm. The pain decreases slightly at night, when the arm hangs down from the bed. Moreover, the woman notes deteriorating vision and the weight loss of 4 kg. She does not smoke. Objectively, she is undereating, the pulse on the left arm cannot be found. There is no pulsation over the left carotid artery, a murmur is heard above the right carotid artery. Make the diagnosis:

- a. Systemic lupus erythematosus
- b. Arterial thrombosis of the left arm
- c. Dermatomyositis

d. Obliterating aortoarteritis

- e. Neurological amyotrophy

88. 3 hours after a trauma, a young man developed bradycardia of 46/min., anisocoria D>S, hemi-hyperreflexia S>D, hemihypesthesia on the left, and a convulsive disorder. The character of this process needs to be clarified. What method of examination will be the most accurate for this purpose?

- a. Brain CT**
- b. Skull X-ray
- c. Electroencephalography
- d. Echoencephalography
- e. Lumbar puncture

89. A 53-year-old man complains of general weakness, loss of appetite, and painful vesicles appearing on his skin. The disease onset occurred suddenly, after hyperinsolation one week ago. Examination detects isolated vesicles with wrinkled opercula and occasional painful erosions on the skin of the patient's torso and limbs. Nikolsky sign is positive. What is the most likely diagnosis?

- a. Duhring's disease (dermatitis herpetiformis)
- b. Herpes
- c. Nonacantholytic pemphigus

d. Acantholytic pemphigus

- e. Toxicodermia

90. A 23-year-old patient complains of sharp pain in the throat on the left that radiates to the left ear, inability to open the mouth, a fever of 38.8°C, bad breath, and excessive salivation. Objectively, the following is observed: marked trismus of the masticatory muscles, facial asymmetry on the left. The left palatine tonsil is hyperemic and displaced to the middle of the pharynx, the uvula is displaced to the right. Hyperemia, infiltration, and edema are observed in the soft palate on the left. The retromandibular lymph nodes on the left are enlarged and painful to palpation. What is the most likely diagnosis in this case?

- a. Left-sided peritonsillar abscess**
- b. Acute periodontitis
- c. Submandibular lymphadenitis on the left
- d. Diphtheria
- e. Tumor of the left palatine tonsil

91. A premature newborn boy (pregnancy 5, birth 1, gestation term - 27 weeks) has irregular respiration of <30/min. after birth and SpO₂ 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. Prescribe an antibacterial therapy
- b. Administer the surfactant preparation intratracheally within the first 15 minutes after birth**
- c. Administer the surfactant preparation intratracheally 2 hours after birth
- d. Provide artificial pulmonary ventilation with an Ambu bag and a mask
- e. Provide oxygen therapy using an oxygen tent

92. The microclimate of industrial premises can be characterized by the following parameters: average air temperature - +35°C, radiant temperature - +30°C, relative air humidity - 50%, air flow velocity - 0.01 m/s. Name the main type of heat transfer that takes place in such microclimatic conditions.

- a. Convection
- b. Radiation
- c. Evaporation**
- d. -
- e. Conduction

93. A 13-year-old girl complains of fatigability, frequent headaches, cardialgia. Eight years ago she had a case of pyelonephritis. Urine analyses periodically revealed leukocyturia. The child has undergone no further treatment. On examination: increased BP up to 150/100 mm Hg. Ultrasound investigation revealed significant reduction of the right kidney. What process is leading in arterial hypertension pathogenesis in this case?

- a. Increased cortisol level
- b. Hyperactivity of renin-angiotensin system**
- c. Disruption of renal circulation
- d. Hypersympathicotonia
- e. Disruption of water-electrolytic balance

94. What should be prescribed as secondary prevention drugs for a patient with atrial fibrillation after an ischemic stroke caused by cardiac embolism?

- a. beta-blockers
- b. Oral anticoagulants**
- c. Aspirin or clopidogrel
- d. Nootropics
- e. Calcium antagonists

95. A chronic alcoholic was hospitalized into the therapeutic inpatient unit due to pneumonia. On the day 5 of his hospitalization he became disoriented in time and space, developed fear-inducing visual hallucinations and motor agitation. Full body tremor and tremor of the limbs are observed. X-ray and physical examinations detect the signs of his convalescence from pneumonia. What tactics should be chosen regarding this patient?

- a. Continue the treatment in the therapeutic department
- b. Compulsory medical treatment for alcoholism
- c. Transfer into the neuroresuscitation department
- d. Discharge from the hospital
- e. Transfer into the inpatient narcology department**

96. Human body receives from the atmosphere a number of chemicals. What type of action results in the combined effect that is less than the sum of isolated effects of these chemicals on the body?

- a. Isolated action
- b. Complex action
- c. Antagonism**
- d. Potentiation
- e. Synergistic action

97. A 67-year-old patient has suddenly developed slurred (unintelligible) speech, voice change (nasal voice), dysphagia, and the blood pressure of 120/80 mm Hg. The symptoms lasted for 2 hours, after which they regressed on their own. What is the most likely diagnosis in this case?

- a. Intracerebral hemorrhage
- b. Hypertensive encephalopathy
- c. Transient ischemic attack**
- d. Cerebral infarction
- e. Subdural hemorrhage

98. A patient complains of a rash and itching that becomes worse in the evening and at night and has

been observed for 2 weeks already. Objectively, a papulovesicular rash with its elements arranged in pairs is observed on the lateral areas of the chest and abdomen and in the interdigital folds. What is the most likely diagnosis in this case?

- a. Scabies
- b. Psoriasis
- c. Eczema
- d. Neurodermatitis
- e. Toxicoderma

99. A polyclinic employs 25 specialist doctors for providing medical care to the people. What type of treatment and prevention care is provided by these doctors?

- a. Pre-medical
- b. Primary
- c. Tertiary
- d. Secondary**
- e. -

100. A 32-year-old woman complains of general weakness, low-grade fever persisting for 4 months, lumbar pain, and dysuria. Anamnesis includes frequent acute respiratory diseases, overexposure to cold, low-calorie diet, a case of pulmonary tuberculosis in childhood. Clinical urine analysis: pH - 4.8, leukocyturia, hematuria. Complete blood count: leukocytosis, lymphocytosis, raised ESR. Urography concludes: dilatation of renal pelvis and calyceal system of both kidneys, foci of calcification in the projection of right kidney parenchyma. What is the most likely diagnosis?

- a. Chronic pyelonephritis
- b. Right renal carcinoma
- c. Right renal cyst
- d. Nephrotuberculosis**
- e. Acute glomerulonephritis

101. A 33-year-old woman was hospitalized on day 8 after the onset of the disease with complaints of intense headache, lack of appetite, constipation, sleep disturbances, and a fever of 39.2°C. Objectively, her condition is severe, the patient is adynamic, pulse - 78/min., blood pressure - 130/75 mm Hg. Several elements of roseola rash were detected on the skin of her abdomen. The abdomen is distended. Hepatosplenomegaly is observed. What is the most likely diagnosis in this case?

- a. Influenza
- b. Typhus
- c. Leptospirosis
- d. Pseudotuberculosis
- e. Typhoid fever**

102. Increased general morbidity of the local population is observed in the area near a factory, where atmosphere is being intensively polluted with sulfurous gas. What effect does polluted air have on human body in this case?

- a. Selective
- b. Acute nonspecific
- c. Chronic specific
- d. Chronic nonspecific**
- e. Acute specific

103. For 20 years the role of excessive weight in ischemic heart disease development among the working age male population over 40 was studied. It was determined that overweight men developed ischemic heart disease more often. What type of epidemiological study is it?

- a. Case-control study
- b. Case report
- c. Experimental study
- d. Case series report
- e. Cohort study**

104. A 32-year-old man complains of pain in his legs that intensifies during walking, intermittent claudication, numbness of his toes, extremity coldness, and inability to walk more than 100 meters. When he sleeps, his leg usually hangs down. The patient has been smoking since he was 16. He drinks alcohol in excess. The left leg is colder than the right one; the skin of the extremities is dry. No pulse can be detected on the pedal arteries, while pulsation of the femoral arteries is retained. What is the most likely diagnosis?

- a. Obliterating endarteritis
- b. Deep thrombophlebitis
- c. Raynaud disease
- d. Diabetic angiopathy
- e. Leriche syndrome (aortoiliac occlusive disease)

105. A 40-year-old patient has acute onset of disease caused by overexposure to cold. Temperature has increased up to 39°C. Foul-smelling sputum is expectorated during coughing. Various moist crackles can be auscultated above the 3rd segment on the right. Blood test: leukocytes - 15,0 · 10⁹/l, stab neutrophils - 12%, ESR- 52 mm/hour. On X-ray: in the 3rd segment on the right there is a focus of shadow 3 cm in diameter, low density, with fuzzy smooth margins and a clearing in its center. What disease is most likely in the given case?

- a. Peripheral pulmonary cancer
- b. Pulmonary cyst
- c. Pneumonia complicated by an abscess
- d. Cystic echinococcosis
- e. Infiltrative tuberculosis

106. 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. Nimesulide
- b. Colchicine
- c. Febuxostat
- d. Allopurinol
- e. Methotrexate

107. 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. Sulfonamides
- b. Penicillin antibiotics
- c. Cycloferon or other immunomodulators
- d. Drugs of the tinidazole group
- e. Macrolide antibiotics

108. The inpatient care provided to the population of a certain district is being analyzed. What indicator should be used when deciding, whether to reduce the number of the available hospital beds?

- a. Bed turnover
- b. Average duration of treatment
- c. Average duration of inpatient stay
- d. Average annual bed occupancy
- e. Mortality rate

109. A 42-year-old man, who has been suffering from a duodenal ulcer for 20 years, has developed a constant feeling of heaviness in his stomach after eating. His eructation carries the smell of decay and vomiting occurs with the food eaten the day before. He has lost weight. Objectively, his condition is relatively satisfactory, tissue turgor is reduced. The abdomen is soft on palpation, there are no signs of peritoneal irritation, and a <> can be heard in the epigastrium. Defecation occurs once every 3 days. What complication most likely corresponds with the patient's condition and

the described clinical presentation?

- a. Chronic pancreatitis
- b. Stomach cancer
- c. Ulcerative stenosis of the pylorus**
- d. Covered perforation of an ulcer
- e. Ulcer penetration

110. An injured electrician in a state of clinical death is being resuscitated. ECG registers large-focal ventricular fibrillation. When, according to the clinical practice guidelines for sudden circulatory arrest, must be medicines administered, namely, adrenaline solution and amiodarone solution?

- a. After the fourth defibrillation
- b. At the very beginning of the resuscitation measures
- c. After the first defibrillation
- d. After the second defibrillation
- e. After the third defibrillation**

111. A 35-year-old woman came to a doctor with complaints of shortness of breath, deteriorated vision ("a haze before her eyes"), double vision, strabismus, nystagmus, markedly dry mouth, nasal voice, difficulty swallowing, muscle weakness, and abdominal distension. According to her diet history, 20 hours ago she was eating canned meat and home-cooked fish. What is the most likely diagnosis in this case?

- a. Food poisoning of chemical origin
- b. Foodborne toxicoinfection
- c. Botulism**
- d. Foodborne mycotoxicosis
- e. Staphylococcal intoxication

112. A 45-year-old man complains of tension and pain in the masticatory muscles and difficulty opening his mouth. According to the patient's medical history, the disease onset was 4 days ago, when the patient developed aching pain in the area of the wound on the right hand. The injury occurred 2 weeks ago, when the patient was doing garden work. The patient had no vaccinations in the past 10 years. Objectively, trismus of the masticatory muscles is observed, the abdomen is tense and painful, body temperature - 38.9°C) What is the most likely diagnosis in this case?

- a. Tetanus**
- b. Rabies
- c. Encephalitis
- d. Peritonsillar abscess
- e. Poliomyelitis

113. The body of a citizen was found at the place of his dwelling. On his face, neck, and hands there were detected irregular-shaped wounds, varying from 2x3 cm to 4x5 cm in size. The skin and underlying tissues are absent in the wounds. The margins of the wounds are uneven, with major and minor scalloping along the edges and no signs of bleeding. What is the initiating mechanism of these wounds?

- a. Local effect of cold
- b. Animal bite wounds**
- c. Blast injury
- d. Multiple stab and incised wounds
- e. Pellet gunshot wound

114. 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 constipation. 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. Cadmium poisoning
- b. Mercury poisoning**

c. Lead poisoning

d. Aluminum poisoning

e. Food poisoning

115. A 30-year-old man has received second-degree burns that cover 40% of his body. On the fourth day after the injury, his general condition acutely deteriorated. He developed inspiratory dyspnea, frequent cough with frothy sputum, and cyanotic skin. Auscultation detects numerous wet crackles in the lungs. His blood pressure is 110/60 mm Hg, heart rate - 100/min., respiration rate - 32/min., central venous pressure - 100 mm H₂O, total protein - 50 g/L, Ht - 30%, Hb - 90 g/L. ECG shows sinus tachycardia. What mechanism of pulmonary edema pathogenesis is the main one in this case?

a. Surfactant dysfunction

b. Pulmonary hypoventilation

c. Decreased contractility of the myocardium

d. Decreased plasma osmotic pressure

e. Hypervolemia of the pulmonary circulation

116. A 30-year-old patient has been hospitalized. The patient's history states that the disease onset was acute and started with frequent watery stools, later followed by thirst and profuse vomiting without nausea. Objectively, the body temperature is 35.4°C. The patient's condition is severe, the skin is cold. Tissue turgor and skin elasticity are significantly reduced. The facial features are drawn. The voice is hoarse. Acrocyanosis and anuria are observed. Pulse - 130/min., weak. Blood pressure - 60/30 mm Hg. The tongue is dry. The abdomen is sunken and painless, palpation detects noticeable rumbling in the intestines. What is the most likely diagnosis in this case?

a. Cholera

b. Shigellosis

c. Salmonellosis

d. Foodborne toxic infection

e. Rotavirus gastroenteritis

117. A patient suffering from infiltrative pulmonary tuberculosis was prescribed streptomycin, rifampicin, isoniazid, pyrazinamide, vitamin C) One month after the beginning of the treatment the patient started complaining of reduced hearing and tinnitus. What drug has such a side effect?

a. Vitamin C

b. Rifampicin

c. Pyrazinamide

d. Streptomycin

e. Isoniazid

118. A 35-year-old man, who for the last 3 years has been on hemodialysis due to chronic glomerulonephritis, developed disturbances of the cardiac performance, hypotension, progressing weakness, and dyspnea. ECG shows bradycardia, 1st degree atrioventricular block, tall and sharp T-waves. The day before he had a serious break from his solid and liquid diet. What biochemical changes are the most likely cause of the described clinical presentation?

a. Hypernatremia

b. Hyperkalemia

c. Hypocalcemia

d. Hyperhydration

e. Hypokalemia

119. The left hand of a newborn is extended in all its joints, stretched along the torso, and pronated in the forearm. Active movements of the shoulder joint are retained. The hand is flattened, atrophied, cold to touch, hangs passively. Grasping and palmomental reflexes are absent at the affected side. Hemogram indicators are normal. Make the most likely diagnosis:

a. Hypoxic-ischemic encephalopathy

b. Inferior distal obstetrical paralysis

c. Osteomyelitis

d. Complete obstetrical paralysis

e. Proximal obstetrical paralysis

120. An 11-year-old boy for a month has been presenting with increasing pain in the right femur. In the painful area there is a non-mobile painful tumor with unclear margins. The child complains of general indisposition, weakness, increased body temperature up to 39°C) X-ray shows widened medullary cavity, small foci of cancellous bone destruction, and onion-like lamellar exfoliation of the cortical layer. What is the most likely pathology resulting in such clinical presentation?

- a. Chondrosarcoma
- b. Fibrosarcoma
- c. Juxtacortical sarcoma
- d. Osteogenic sarcoma
- e. Ewing sarcoma**

121. A 72-year-old man on the 7th day after a surgical reposition of an intertrochanteric hip fracture has suddenly developed dyspnea and an intense pain in the left side of his chest. Examination reveals distended cervical veins and cyanosis. His respiration rate is 26/min. Auscultation detects weakened breathing over the left lung. Heart rate - 98/min. Blood pressure - 120/70 mm Hg. CT scan shows significant disappearance of the lung pattern on the left. Echocardiography shows no signs of right ventricle overload. What next step will be the most advisable in this case?

- a. Surgical embolectomy
- b. Prescribing aspirin (acetylsalicylic acid)
- c. Thrombolytic injection into the left pulmonary artery
- d. Prescribing low molecular weight heparin**
- e. Installing a vena cava filter

122. Examination of a newborn child detects an impaired function and a decreased muscle tone in the distal part of the right arm. Objectively, there are no movements in the elbow joint, the hand is pale and cold, with a "claw hand" presentation. The movements in the shoulder joint are preserved. The Moro reflex on the right is reduced. The Babkin reflex on the right is absent. What is the most likely diagnosis in this case?

- a. Klumpke's paralysis**
- b. Erb's palsy
- c. Myelitis
- d. Thoracic spinal cord injury
- e. Kerer's paralysis

123. 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. Vitamins
- b. Nootropics
- c. Anticholinesterases
- d. Nonsteroidal anti-inflammatory drugs**
- e. Analgesics

124. 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. Labor stimulation
- b. Continuation of pregnancy
- c. Breech extraction
- d. Urgent caesarean section**
- e. Childbirth through the natural birth canal

125. A 5-day-old child has diffuse erythema, vesicles, erosions, cracks, and peeling of the epidermis. The boy looks as if he were scalded with boiling water. During examination, the child's general

condition is extremely severe. The child is markedly anxious and refuses to eat. The body temperature is 39.8°C. The Nikolsky sign is positive. Hyperesthesia is observed. What is the most likely diagnosis in this case?

- a. Exfoliative dermatitis
- b. Neonatal pemphigus
- c. Phlegmon of the newborn
- d. Mycotic erythema
- e. Finger's pseudofurunculosis (Abscessus multiplex infantum)

126. A 38-year-old woman has been suffering from glomerulonephritis for 20 years. For approximately 16 years she has been presenting with progressing renal parenchymal arterial hypertension that became refractory and accompanied by leg edemas. She receives a combination of 100 mg losartan and 20 mg lercanidipine with insufficient antihypertensive effect. What medicine can she be recommended for intensification of the antihypertensive effect of her therapy?

- a. Doxazosin
- b. Urapidil
- c. Bisoprolol
- d. Lisinopril
- e. Torasemide

127. After a fall, a 65-year-old woman complains of pain in her hip joint during movements and inability to rest her full weight on this limb. Objectively, the pain intensifies during palpation, the limb is rotated outwards and shortened. "Stuck heel" sign is positive - the patient is unable to raise her straight leg and hold it in this position, the heel slides on the floor, when bending the leg. What is the most likely diagnosis in this case?

- a. Femoral neck fracture
- b. Diaphyseal femoral fracture
- c. Rupture of the hip joint capsule-ligament apparatus
- d. Subtrochanteric femoral fracture
- e. Transtrochanteric femoral fracture

128. 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. Werlhof disease
- b. Acute agranulocytosis
- c. Acute leukemia
- d. Hypoplastic anemia
- e. Hemorrhagic vasculitis

129. Examination detected vesicles with seropurulent content on the neck, back of the head, and buttocks of an infant on the 4th day of life. The patient's condition is satisfactory, the child is active, all newborn reflexes can be fully induced, the umbilical cord is at the stage of mummification, the umbilical area is without any peculiarities. What disease can be suspected?

- a. Miliaria
- b. Epidermolysis bullosa
- c. Vesiculopustulosis
- d. Neonatal pemphigus
- e. Phlegmon

130. A 50-year-old man has been hospitalized in a severe condition. ECG revealed signs of acute myocardial infarction. Objectively, the patient is anxious, tense, disoriented in the place and time and correctly oriented in his own person. The patient experiences auditory and bright visual hallucinations of a frightening nature, under the influence of which he is agitated and prone to aggressive actions. The patient expresses fragmentary delusions. What leading psychopathological syndrome is observed in the patient?

a. Delirious syndrome

b. Paranoid syndrome

c. Amentive syndrome

d. Hallucinosis

e. Oneiroid syndrome

131. A 54-year-old woman has been suffering from femoral osteomyelitis for over 20 years. In the last month she developed gradually progressing leg edemas. In the urine: proteinuria - 6.6 g/L. In the blood: dysproteinemia in the form of hypoalbuminemia, increased alpha₂- and gamma-globulin levels, ESR - 50 mm/hour. Make the diagnosis:

a. Multiple myeloma

b. Acute glomerulonephritis

c. Secondary renal amyloidosis

d. Systemic lupus erythematosus

e. Chronic glomerulonephritis

132. A woman complains of weight loss, pain in the lower abdomen, and stools with mucus and blood that occur up to 12 times per 24 hours. Fibrocolonoscopy detects the following in the area of the sigmoid colon: local pseudopolypous proliferations, flat superficial irregular-shaped ulcerated patches that do not merge together and are covered with mucus and fibrin, and contact bleeding. What is the most likely diagnosis in this case?

a. Intestinal polyposis

b. Crohn's disease

c. Irritable bowel syndrome

d. Nonspecific ulcerative colitis

e. Pseudomembranous colitis

133. A 7-month-old child was hospitalized into the surgical department 8 hours after the onset of the disease. The child has anxiety attacks and occasional vomiting. Objectively, a tumor-like formation is palpable in the abdomen on the right. Rectal examination detects blood in the form of "raspberry jelly". What is the most likely diagnosis in this case?

a. Tumor of the abdominal cavity

b. Intestinal duplication

c. Intussusception

d. Helminth infestation

e. Enterocystoma

134. A 13-year-old boy suddenly lost his consciousness and developed generalized tonic-clonic seizures. Objectively, he presents with dilated pupils, no photoresponses, marked cyanosis of the face, biting of the tongue, white foam from the mouth, involuntary urination and defecation. According to the patient's medical history, such attacks occur from the age of three several times a year, the child constantly takes sedatives and anticonvulsants. What drug must be administered in this case?

a. Adrenaline

b. Diazepam

c. Chlorpromazine

d. Atropine

e. Fentanyl

135. A 3-year-old child has episodes accompanied by cyanosis, sudden anxiety, and squatting. Objectively, the child has "drumstick" deformation of the finger phalanges and nails that resemble a clockface. The cardiac dullness boundaries are shifted to the left and right. A systolic tremor can be detected in the second intercostal space near the left edge of the sternum. A coarse systolic murmur can be heard with p.max in the second intercostal space. The second heart sound is weakened over the base of the heart. X-ray shows that the heart is in the form of a "wooden shoe", the pulmonary pattern is poorly visible. What is the most likely diagnosis in this case?

a. Ventricular septal defect

b. Tetralogy of Fallot

- c. Primary bacterial endocarditis
- d. Dilated cardiomyopathy
- e. Atrial septal defect

136. A 23-year-old woman with type 1 diabetes mellitus during the 2nd week of community-acquired pneumonia developed nausea and vomiting. In the evening she has lost her consciousness and was hospitalized. Objectively, the patient's skin is pale and dry. Her respiration is loud, the tongue is dry, with brown deposit. Her heart rate is 129/min., blood pressure is 85/50 mm Hg. Palpation of the patient's abdomen provokes no response. The liver is +3 cm. Acetone test is markedly positive, blood glucose is 26 mmol/L. Make the provisional diagnosis:

- a. Ketoacidotic coma
- b. Hepatic coma
- c. Hyperosmolar coma
- d. Infectious toxic shock
- e. Lactacidemic coma

137. A 28-year-old pregnant woman was hospitalized into the inpatient department. Her diagnosis is as follows: pregnancy III, 7-8 weeks of gestation; rheumatism, inactive phase, III degree mitral stenosis. What is the management plan for this patient?

- a. Maintenance of the pregnancy, surgical treatment of the valvular defect (mitral commissurotomy)
- b. Prescription of corticosteroids and immunosuppressants
- c. Termination of the pregnancy after surgical treatment of the valvular defect (mitral commissurotomy)
- d. Maintenance of the pregnancy, planned hospitalization during the critical periods, conservative therapy
- e. Medically-indicated termination of the pregnancy

138. A trial was conducted to study the effectiveness of arterial hypertension treatment using a new drug, compared with traditional therapy. There were 3,000 participants in the trial, divided into two identical groups, taking into account their age, sex, stage of the disease, etc. One group was receiving treatment with the new drug, while the other was receiving traditional therapy and was the control group. The trial participants did not know which therapy they were receiving. What type of trial was conducted in this case?

- a. Case-control study
- b. Double-blind randomized controlled trial
- c. Prospective cohort study
- d. Blind randomized controlled trial
- e. Cross-sectional study

139. In the air of the feed kitchen at the poultry factory, at the area where formula feed is being mixed, the dust concentration reaches 200 mg/m^3 . Air microflora is represented predominantly by Aspergillus and Mucor fungi. What effect determines pathogenic properties of the dust?

- a. Allergenic
- b. Mutagenic
- c. Fibrogenic
- d. Toxic
- e. Teratogenic

140. A 62-year-old man complains of a moderate pain in his left foot in the area of his metatarsophalangeal joint. The pain intensifies on movement. The disease onset was 12 years ago, when he first had <>an acute pain attack<>. Two years ago, a yellow-white nodule appeared under the skin that covers the joint. Examination shows that the joint is deformed and cyanotic. X-ray of the affected joint shows narrowing of the joint space and well-defined bone tissue defects in the epiphysis (<>punched-out erosions<>). What is the most likely diagnosis in this case?

- a. Osteoarthritis
- b. Gouty arthritis
- c. Reactive arthritis
- d. Rheumatoid arthritis

e. Reiter's syndrome

141. A 14-year-old girl developed morning fever, cheilitis, stomatitis, photosensitivity, leukocytosis of $24\cdot10^9/L$, and thrombocytopenia. Laboratory studies detect antinuclear antibodies in a high titer. Make the provisional diagnosis.

a. Dermatomyositis

b. Sepsis

c. Systemic lupus erythematosus

d. Juvenile idiopathic arthritis

e. Systemic scleroderma

142. A 30-year-old man came to the family physician. 2 months ago he underwent a surgery for open fracture of the humerus. On examination the patient's condition is satisfactory; in the area of the postoperative wound there is a fistula that discharges a small amount of pus; the area itself is red; fluctuation is detected. X-ray shows destruction of the humerus with sequestra. What complication did the patient develop during the postoperative period?

a. Posttraumatic osteomyelitis

b. Hematogenous osteomyelitis

c. Wound suppuration

d. Suture sinus

e. Posttraumatic phlegmon

143. A 37-year-old woman received an occupational trauma that resulted in a severe vision impairment. Now she needs to be trained for another occupation. What type of rehabilitation should the doctor choose for the patient in this case?

a. Occupational rehabilitation

b. Medical rehabilitation

c. Social rehabilitation

d. Psychological rehabilitation

e. Target rehabilitation

144. A 73-year-old woman came to the family physician for one of her regular follow-up examinations. Three months ago she was found to have type 2 diabetes mellitus. She was keeping to her diet and exercise plan and taking phytopreparations. On examination her fasting glucose was within the range of 7.8-8.6 mmol/L, HbA1c - 7.9%. Height - 164 cm, weight - 83 kg. What blood sugar-controlling medicine should she be prescribed first in the course of her pharmacological therapy?

a. Insulin

b. Gliclazide

c. Glimepiride

d. Metformin

e. Glibenclamide

145. A 49-year-old patient complains of swallowing disorder that intensifies during eating solid food, hiccups, hoarse voice, nausea, regurgitation, significant weight loss (15 kg within 2,5 months). Objectively: body weight is reduced; the skin is pale and dry; vesicular respiration; heart sounds are sufficiently sonorous; heart rate is rhythmic. The abdomen is soft, no pain on palpation. The liver is not enlarged. What investigation is most necessary for making the diagnosis in this case?

a. X-ray in the Trendelenburg position

b. Investigation of gastric secretion

c. X-ray of the gastrointestinal tract

d. Clinical blood analysis

e. Esophagoduodenoscopy with biopsy

146. A 47-year-old woman complains of extremely unpleasant sensations in the area of her abdomen: itching, tingling, burning. She explains this as having a "hole in her stomach" and asks to be examined by a doctor. Objective examination detected no somatic pathology. What perception disorder is observed in this patient?

a. Cenestopathy

- b. Hyperesthesia
- c. Paresthesia
- d. Synesthesia
- e. Illusions

147. A boy had a foreign body removed from under his nail plate. 3 days later he developed a sharp throbbing pain at the end of his distal phalanx, which intensifies when the phalanx is pressed, hyperemia of the nail fold, elevated body temperature up to 38.5°C , and nail plate discoloration.

Make the diagnosis:

- a. Erysipeloid
- b. Abscess
- c. Erysipelas
- d. Subungual pararitium**
- e. Paronychia

148. A 16-year-old teenager complains of weakness, dizziness, and heaviness in the left subcostal region. Objectively, the skin and visible mucosa are icteric. The tower skull syndrome is observed. The liver is +2 cm. The lower edge of the spleen is at the level of the navel. In the blood: erythrocytes - $2.7 \cdot 10^{12}/\text{L}$, Hb - 88 g/L, leukocytes - $5.6 \cdot 10^9/\text{L}$, ESR - 15 mm/hour. What is the most likely change in the bilirubin levels in this patient?

- a. Increase in unconjugated and conjugated bilirubin levels
- b. Increase in conjugated bilirubin levels
- c. Increase in unconjugated bilirubin levels**
- d. Decrease in unconjugated bilirubin levels
- e. Decrease in conjugated bilirubin levels

149. What category of medical waste includes the materials contaminated with biological fluids (blood, secretions of the patients), organic surgical waste, and pathological waste?

- a. A
- b. B**
- c. D
- d. C
- e. -

150. An unconscious patient was delivered to a hospital by an ambulance. Objectively, his body temperature is 39°C , he presents with convulsions and red dry skin. It is known that the patient works as a stoker in the boiler room. What is the likely diagnosis?

- a. Heat stroke**
- b. Acute food poisoning
- c. Acute viral respiratory infection
- d. Hypertensive urgency
- e. CO poisoning

151. The history of a 70-year-old patient states that the disease onset was approximately six months ago. According to her relatives, her memory of current events was sharply deteriorating, in particular, she was forgetting the way home when returning from the store and started experiencing difficulties while performing her usual daily activities. The memory of past events was retained. Signs of semantic and amnestic aphasia were observed. Echolalia is periodically noted. The patient is in a low mood and has slight anxiety. She has a history of craniocerebral trauma and had diabetes mellitus for approximately 15 years. What is the most likely diagnosis in this case?

- a. Alzheimer's disease
- b. Involutional depression
- c. Encephalitis
- d. Vascular dementia
- e. Brain tumor

152. A 30-year-old woman complains of no periods for 5 months and milk discharge from her mammary glands. Examination reveals that the uterus is small, mobile, and painless; the appendages

are normal. Skull X-ray detects no pathology. Laboratory studies detect increased levels of prolactin in patient's blood serum. Make the diagnosis.

- a. Pituitary adenoma
- b. Sclerocystic ovary syndrome
- c. Hyperprolactinemia
- d. Hypothyroidism
- e. Tuberculous endometritis

153. A man complains of pain and skin redness in his right calf. Objectively, he has a fever of 38.5°C and enlarged and painful inguinal lymph nodes on the right. The skin of the affected limb is edematous, hyperemic, and has rash elements in the form of vesicles filled with a dark liquid. Its palpation is painful. There is a clear margin between the red area and healthy skin. Make the diagnosis:

- a. Anthrax, cutaneous form
- b. Erysipelas, hemorrhagic form
- c. Chickenpox
- d. Herpes infection
- e. Phlegmon of the calf

154. A 22-year-old patient complains of general weakness, difficulty breathing through the nose, pain in the epigastrium, nausea, and dark brown urine. According to the patient's medical history, the disease onset was 4 days ago, when the patient developed a fever of 37.5°C . What is the most likely diagnosis in this case?

- a. Viral hepatitis C
- b. Viral hepatitis A
- c. Leptospirosis
- d. Typhoid fever
- e. Infectious mononucleosis

155. A 33-year-old woman has been hospitalized with gastrointestinal bleeding. Objectively, her skin and mucosa are pale. She has a history of anaphylactic reactions to blood transfusions of the same blood group. What transfusion medium must be used for a transfusion in this case?

- a. Erythrocyte suspension
- b. Washed erythrocytes
- c. Fresh citrated blood
- d. Packed erythrocytes depleted of leukocytes and platelets
- e. Packed erythrocytes (native)

156. A 43-year-old woman complains of persistent abdominal pain with recurrent pain attacks, nausea, repeated vomiting with stagnant bowel content, abdominal distension, and flatulence. She has been presenting with these signs for 7 hours. Pulse is 116/min. The tongue is dry and brown. The abdomen is symmetrically distended, soft, painful. Percussion reveals tympanitis. On auscultation there are bowel sounds with a metallic overtone, sounds of splashing and dripping. Make the diagnosis:

- a. Acute nonspecific colitis
- b. Acute intestinal obstruction
- c. Acute erosive gastritis
- d. Acute necrotizing pancreatitis
- e. Acute destructive cholecystitis

157. An 18-year-old young man complains of pain in his knee and ankle joints and a fever of 39.5°C . A week and a half before, he had a case of respiratory disease. Objectively, his body temperature is 38.5°C , his knee and ankle joints are swollen. His pulse is 106/min., rhythmic. His blood pressure is 90/60 mm Hg. The heart borders are normal, the heart sounds are weakened, and there is a soft systolic murmur at the apex. What parameter is most closely associated with the possible etiology of this process?

- a. Rheumatoid factor
- b. Seromucoid

- c. alpha_1-antitrypsin
- d. Creatine kinase
- e. Antistreptolysin O

158. A patient with complaints of disturbed gait and forced laughter was hospitalized into the neurological department. Objectively, he has a mask-like face and muscle hypersthenia. For a long time he has been working at the various industrial objects, where, in violation of the hygienic norms, the high levels of exposure to the chemicals were registered. What harmful factor is the likely cause of this pathology?

- a. Manganese
- b. Mercury
- c. Lead
- d. Cadmium
- e. Benzene

159. On the 5th day after giving birth a postparturient woman complains of a pain in her left mammary gland and body temperature up to 38.1°C) Examination shows that her mammary gland is enlarged and painful on palpation, the nipple is edematous and has fissures, the upper external quadrant of the gland is hyperemic. Name the measures that would have prevented the development of this complication in the patient:

- a. Stop breastfeeding when fissures appear
- b. Feeding on demand, expression of breast milk, prevention of nipple fissures
- c. Feeding on schedule
- d. Feeding no longer than 10 minutes through an overlay
- e. Constant expression of breast milk

160. Examination of the residents of a village detected symptoms that were characteristic of the majority of its population older than 25 years: fragile tooth enamel with dark yellow pigmentation spots, diffuse osteoporosis, ossification of ligaments and joints, and functional disorders of the central nervous system. What microelement can cause this medical condition, if it is present in an excess in food or drinking water?

- a. Strontium
- b. Nickel
- c. Iodine
- d. Fluorine
- e. Cesium

161. A 7-day-old girl is markedly inert and suffers from recurrent (sometimes projectile) vomiting, liquid stools, exerosis, and marked progressing hypotension. She gains no weight. Her skin is earthy gray and her nipples are pigmented. She presents with enlarged clitoris, incomplete union of the vulvar lips, and incomplete separation of the urethra and vagina. She has marked hyperkalemia and hyponatremia, metabolic acidosis, and hypoglycemia. Her blood aldosterone levels are low, while her plasma renin activity is high. Make the provisional diagnosis:

- a. Adrenogenital syndrome, simple- virilizing form
- b. Hermaphroditism
- c. Turner syndrome
- d. Adrenogenital syndrome, hypertensive form
- e. Adrenogenital syndrome, salt-wasting form

162. On ultrasound of the thyroid gland, a 47-year-old woman presents with a hypoechoic node 1.6 cm in diameter with blurred margins and intranodular hypervascularization. The doctor suspects thyroid carcinoma. What method should be used to verify the diagnosis?

- a. Case monitoring
- b. Thyroid scintigraphy
- c. Positron emission tomography (PET)
- d. Fine-needle aspiration biopsy
- e. Determine TSH level in the blood

163. 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. Down syndrome
- b. Patau syndrome
- c. Klinefelter syndrome
- d. Edwards syndrome
- e. Turner syndrome

164. Blood pressure and age were studied in 200 patients with essential hypertension. What statistical value should be used to measure the strength of the relationship between these characteristics?

- a. Correlation coefficient
- b. Student's t-test
- c. Sigma deviation
- d. Representation error
- e. Variation coefficient

165. A 37-year-old woman complains of marked general weakness, edema of the face and hands, rapid fatigability when walking, difficult swallowing, disturbances of the cardiac performance. These signs appeared 11 days after a vacation at the seaside. Objectively, the patient has face erythema, "glasses" sign, edema of the lower leg muscles. Heart sounds are muffled, blood pressure is 100/70 mm Hg. In the blood: ASAT - 95U, ALAT - 130U, increased activity of aldolase and creatine phosphokinase. What examination will be the most informative in this case?

- a. Muscle biopsy
- b. Test for circulating immune complexes
- c. Gastroduodenoscopy
- d. Electromyography
- e. Electrocardiography

166. A man complains of a heaviness behind his sternum, periodical sensation of food retention, and dysphagia. During X-ray the barium contrast reveals a single pouch-like protrusion in the right anterior wall of the esophagus. The protrusion has clear margins and a clearly defined neck. What is the most likely diagnosis in this case?

- a. Esophageal polyp
- b. Esophageal carcinoma
- c. Varicose veins of the esophagus
- d. Esophageal diverticulum
- e. Hiatal hernia

167. A worker of a blowing shop complains of headache, irritability, sight impairment - he sees everything as if through a "net". Objectively: hyperemic sclera, thickened cornea, decreased opacity of pupils, visual acuity is 0,8 in the left eye, 0,7 in the right eye. The worker uses no means of personal protection. What diagnosis is most likely?

- a. Blepharospasm
- b. Keratitis
- c. Cataract
- d. Progressive myopia
- e. Conjunctivitis

168. A 9-year-old boy is in a severe condition. His body temperature is 38-39°C, he has nosebleeds and complains of pain in his bones. Objectively, the boy presents with acute pallor, hemorrhagic rash, and ulcerative necrotizing stomatitis. All the groups of lymph nodes are enlarged. The liver is +5 cm. The spleen is +4 cm. What test will be decisive for diagnosis-making in this case?

- a. Complete blood count
- b. Myelogram
- c. X-ray of the mediastinum

- d. Abdominal ultrasound
- e. Immune complex testing

169. A 27-year-old woman complains of pain and morning stiffness in the small joints of her hands. Her condition is weather-dependent. Objectively, she presents with swelling and deformation of her proximal interphalangeal joints and her second and third metacarpophalangeal joints. X-ray of the hands detects bone erosions (usurations) and signs of osteoporosis. What is the most likely diagnosis in this case?

- a. Systemic lupus erythematosus
- b. Systemic scleroderma
- c. Rheumatic polyarthritis
- d. Rheumatoid arthritis
- e. Psoriatic arthritis

170. A 23-year-old woman came to the gynecological clinic. She complains of pain, itching, and burning in her vulva, general weakness, indisposition, elevated body temperature up to 37.2°C , and headache. On examination in the vulva there are multiple vesicles up to 2-3 mm in diameter with clear contents against the background of hyperemia and mucosal edema. Make the provisional diagnosis:

- a. Vulvar cancer
- b. Primary syphilis
- c. Papillomavirus infection
- d. Genital herpes infection
- e. Cytomegalovirus infection

171. A multigravida on the 38th week of her pregnancy complains of increased BP up to 140/90 mm Hg, edema of the shins for 2 weeks. In the last month she gained 3.5 kg of weight. Urine analysis: protein - 0.33 g/L. What is the most likely diagnosis:

- a. Pregnancy edema
- b. Moderate preeclampsia
- c. Mild preeclampsia
- d. Severe preeclampsia
- e. Pregnancy hypertension

172. 10 hours after birth a child developed jaundice, hypotonia, hyporeflexia, and moderate hepatosplenomegaly. Feces and urine are of normal color. Umbilical cord blood bilirubin is 51 $\mu\text{mol/L}$ due to unconjugated bilirubin levels. In venous blood: erythrocytes - $3.5 \cdot 10^{12}/\text{L}$, Hb- 140 g/L, reticulocytes - 1.5%, bilirubin - 111 $\mu\text{mol/L}$, conjugated - 11 $\mu\text{mol/L}$, ALT- 40 U/L, AST- 30 U/L. Mother's blood group is A(II) Rh(-), child's blood group is A(II) Rh(+). What laboratory test can confirm the diagnosis?

- a. Measurement of glucose 6-phosphate dehydrogenase levels in erythrocytes
- b. Coombs test
- c. Measurement of erythrocyte osmotic resistance
- d. Erythrocytometry
- e. Viral hepatitis markers analysis