

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

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

2. In an 8-year-old child, the disease began with a fever of 38.7°C , profuse nasal discharge and wet cough. Examination detects the following: the oropharyngeal mucosa is moderately hyperemic; anterior arches of the soft palate, palatine tonsils, and eyelids are edematous; membranous conjunctivitis is observed on the left; submandibular, cervical, axillary lymph nodes are 0.7×0.7 cm in size and painless; hepatosplenomegaly is observed. What is the most likely diagnosis in this case?

- A. Adenovirus infection
- B. Influenza
- C. Parainfluenza
- D. Infectious mononucleosis
- E. Diphtheria

3. 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. Scleroderma
- B. Rheumatoid arthritis
- C. Sjogren's syndrome
- D. Systemic lupus erythematosus
- E. Rheumatism

4. A 65-year-old man has an over 17-year-long history of chronic obstructive

bronchitis. He complains of dyspnea with difficult inspiration, heaviness in his right subcostal region, and edema of feet and shins. Auscultation detects rough respiration and dry crackles over the lungs and an accentuated split second heart sound in the second intercostal region. What changes can be expected on the ECG?

- A. Right ventricular myocardial hypertrophy
- B. Extrasystole
- C. Deviation of the electrical axis of the heart to the left
- D. Left atrial hypertrophy
- E. Ciliary arrhythmia

5. A 30-year-old woman complains of pain in her lower abdomen, a fever of 38.8°C , and profuse gray-yellow foul-smelling liquid discharge from the genital tract. According to the patient's history, the complaints arose after a sexual intercourse. Examination reveals that the appendages on both sides are enlarged and painful during palpation. What is the most likely diagnosis in this case?

- A. Gonococcal infection
- B. Acute trichomoniasis
- C. Vaginal candidiasis
- D. Syphilis
- E. Endometriosis

6. 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. Adenomyosis
- B. Ovarian endometriosis
- C. Retrocervical endometriosis
- D. Chorionepithelioma
- E. Hormone-producing ovarian tumor

7. A 28-year-old woman complains of pain in her lower abdomen, more on the right, that intensifies during a menstruation. Smearing bloody discharge is observed before and after a menstruation. The woman has a 10-year-long history of infertility. Bimanual examination reveals that the uterus is dense, painless, and not enlarged. To the right of the uterus, a mass $7 \times 8 \times 6$ cm in size with slightly limited mobi-

lity is palpable. The vaginal fornices are free, the discharge is mucous. What is the most likely diagnosis in this case?

- A. Endometrioid ovarian cyst on the right
- B. Uterine endometriosis
- C. Right-sided adnexitis
- D. Cancer of the right ovary
- E. Tumor of the ascending colon

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

- A. Esophageal diverticulum
- B. Esophageal carcinoma
- C. Hiatal hernia
- D. Esophageal varices
- E. Esophageal polyp

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

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

10. A 26-year-old patient developed nausea, vomiting, and diarrhea two hours after eating undercooked red beans. What peptide toxin has caused the food poisoning in this case?

- A. Phasin
- B. Solanine
- C. Muscarine
- D. Muscaridine
- E. Phallotoxin

11. A 25-year-old woman developed a fever of 39°C three weeks after the childbirth. Objectively, her left mammary gland is edematous and painful, the skin there is hyperemic and hot to the touch. What is the most likely diagnosis in this case?

- A. Lactational mastitis
- B. Breast tumor
- C. Diffuse cystic mastopathy
- D. Breast cyst
- E. Mastodynia

12. A 35-year-old patient complains of watery stools with mucus and blood that occur up to 10 times per 24 hours, constant cramping abdominal pain, a fever of 39°C , and general weakness. According to the patient's medical history, the patient was taking clindamycin for a month for the treatment of osteomyelitis. Rectoromanoscopy visualizes gray-yellow plaques against the background of edematous and hyperemic mucosa of the sigmoid colon and rectum. What is the most likely diagnosis in this case?

- A. Pseudomembranous colitis
- B. Intestinal amebiasis
- C. Nonspecific ulcerative colitis
- D. Shigellosis
- E. Crohn's disease

13. An 8-year-old child has a round spot up to 1.0 cm in diameter on the scalp. The skin in the area of the spot is pink and covered with small flour-like scales, the hair there is broken off at the length of 4–5 mm. The child's sister has a similar spot. What is the most likely diagnosis in this case?

- A. Microsporia
- B. Tinea versicolor
- C. Psoriasis
- D. Systemic lupus erythematosus
- E. Scabies

14. Assess the physical development of a 10-year-old girl according to the regression scale, if her body weight and chest circumference parameters are within ± 1 sigma.

- A. Harmonious
- B. Disharmonious
- C. Average
- D. Low
- E. High

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

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

16. A 52-year-old woman complains of general weakness and pain in her lower abdomen. She has a 2-year-long history of postmenopause. Objectively: her abdomen is enlarged and signs of ascites can be observed. Gynecological examination determined that the cervix was cylindrical and clean, the body of the uterus was small and deviated to the right. Behind the uterus and to its left, a lumpy, painless, dense, immobile mass 12x15 cm in size is palpable. What is the most likely diagnosis in this case?

- A. Ovarian cancer
- B. Uterine fibromyoma
- C. Left ovarian cyst
- D. Cancer of the body of the uterus
- E. Endometriosis

17. 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 reaches 5 g/L, the blood pressure increased to 170/120 mm Hg. She developed a headache and her vision became worse. Four hours of intensive treatment had no effect. What tactics would be necessary in this case?

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

18. A 32-year-old man has a closed cerebrocranial trauma, a closed chest trauma, and a closed right femoral fracture. His blood pressure is 100/60 mm Hg, pulse — 124/min., respiratory rate — 28/min. Two hours after the skeletal traction was performed under local lidocaine anesthesia, the patient's condition markedly deteriorated. He developed cyanosis of the face and neck. Blood pressure — 60/40 mm Hg, heart rate — 160/min., respiratory rate — 44/min. What complication has likely developed in this case?

- A. Fat pulmonary embolism
- B. Myocardial infarction, cardiogenic shock
- C. Ischemic stroke
- D. Pulmonary embolism
- E. Acute posthemorrhagic anemia

19. 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, Wasten'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. Cesarean section
- B. Waiting tactics
- C. Vacuum extraction of the fetus
- D. Drug induction of labor
- E. Tocolytic therapy

20. A 45-year-old man, provisionally diagnosed with a transient ischemic attack, was brought by an ambulance from an aniline-producing factory. Objectively, his skin and mucosa are cyanotic. His speech is dysarthric. The man is disoriented in space. His blood test shows the following: erythrocytes — $4.6 \cdot 10^{12}/L$, Hb — 143 g/L, color index — 0.9, leukocytes — $5.6 \cdot 10^9/L$, Heinz bodies — 14%, reticulocytes — 18%, methemoglobin — 36%, ESR — 5 mm/hour. The patient was diagnosed with a moderately severe acute aniline intoxication. What antidote agent will be the most effective in this case?

- A. Methylene blue
- B. Desferal (Deferoxamine)
- C. Sodium thiosulfate
- D. Succimer
- E. Pentacin (Calcium trisodium pentetate)

21. A 30-year-old woman complains of infertility throughout the past 7 years of regular sexual life without using contraceptives. Her menstruations started at the age of 14, last 5–7 days with intervals of 35–45 days, are painful, with moderate discharge. Gynecological examination shows that the external genitals are properly developed, the hair growth pattern is of a female type, the body of the uterus is reduced in size, formations 5x4 cm in size can be palpated on both sides in the area of the uterine appendages. The formations are dense, mobile, and painless. Functional diagnostic tests show that the basal temperature is monophasic.

Ultrasound shows that the ovaries are covered with a thick shell. What is the most likely diagnosis in this case?

- A. Polycystic ovary syndrome
- B. Genital infantilism
- C. Genital tuberculosis
- D. Ovarian cancer
- E. Turner syndrome

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

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

23. For the last 2 years, a 32-year-old woman has been observing periodical pain attacks in her right subcostal area that could be removed with no-spa (drotaverine). The pain is not always associated with meals, sometimes it is caused by anxiety and accompanied by cardiac pain and palpitations. Objectively, the woman is emotionally labile. Abdominal palpation detects a slight pain in the area of the gallbladder. What pathology is the most likely to cause such clinical presentation?

- A. Biliary dyskinesia
- B. Chronic cholecystitis
- C. Chronic cholangitis
- D. Chronic pancreatitis
- E. Duodenitis

24. A 28-year-old woman, who had a severe mental trauma, complains of heavy bleeding that started on day 20 of her menstrual cycle and has been continuing for the last 2 weeks. Gynecological examination shows that her external genitalia are properly developed. The cervix is cylindrical, clean, its external os is closed. The body of the uterus is of normal size, painless, mobile, dense, with a flat surface. The vaginal fornices are deep, the parametrium is free. Vaginal discharge is hemorrhagic and profuse. What is the most likely diagnosis in this case?

- A. Dysfunctional uterine bleeding
- B. Uterine myoma
- C. Cervical cancer
- D. Endometrial cancer
- E. Chorioepithelioma

25. A 25-year-old woman at 38 weeks of her pregnancy complains of headache, pain in the epigastric region, drowsiness, and leg edemas. Her somatic history is normal. Objectively, her blood pressure is 180/120 mm Hg, the fetus is in a longitudinal lie, cephalic presentation, fetal heart rate — 130/min, rhythmic. Urinalysis detects protein levels of 3.3 g/L. What complication of pregnancy has developed in the patient?

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

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

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

27. A 10-year-old boy complains of weakness, sore throat, difficult nasal breathing, and a fever of 39°C. According to the patient's medical history, it is day 4 after the onset of the disease. Objectively, the following is observed: skin pallor, edema of the face and eyelids, significantly enlarged posterior cervical lymph nodes and, to a lesser extent, submandibular, axillary, and inguinal lymph nodes. The oropharyngeal mucosa is hyperemic. The tonsils are hypertrophied and covered with a continuous plaque that can be easily removed with a spatula. Hepatosplenomegaly is observed. What is the most likely diagnosis in this case?

- A. Infectious mononucleosis
- B. Viral hepatitis A
- C. Diphtheria
- D. Scarlet fever
- E. Lymphogranulomatosis

28. A 17-year-old girl complains of pain and edema of her second finger on the right hand. Three days ago she made a manicure. The pain developed on the second day after that. Objectively, her nail fold is edematous, hyperemic, overhangs the nail plate, and is painful to palpation. What is the most likely diagnosis in this case?

- A. Paronychia
- B. Subcutaneous panaritium
- C. Cutaneous panaritium
- D. Subungual panaritium
- E. Erysipeloid

29. 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. Placental abruption
- B. Placenta previa
- C. Hydatidiform mole
- D. Uterine rupture
- E. Amniotic fluid embolism

30. A 3-day-old full-term baby has the following blood test results: indirect bilirubin levels — 345 $\mu\text{mol/L}$, hourly increase — 6.8 $\mu\text{mol/L}$. The child's condition is severe. Objectively, the child presents with decreased reflexes, muscle hypotonia, and limb tremor. The blood of the child and the mother is Rh-incompatible. What would be the most effective method of treatment in this case?

- A. Exchange blood transfusion
- B. Phototherapy
- C. Administration of phenobarbital
- D. Hemosorption
- E. Corticosteroid therapy

31. A 7-year-old child complains of stomachache episodes that occur after mental stress, cold drinks, or ice-cream. After clinical and instrumental examination the boy was diagnosed with hypertensive biliary dyskinesia. What medicines should be prescribed first for the treatment in this case?

- A. Antispasmodics and cholagogues
- B. Cholagogues and choleretics
- C. Sedatives and choleretics
- D. Antioxidants
- E. Antibiotics

32. In a pregnant woman, the external obstetric examination performed using the Leopold-Levytskyi maneuver shows that the fetus is in a longitudinal lie, with the small segment of the head in the entrance into the lesser pelvis. The sagittal suture is in the right oblique dimension, the fonticulus minor is located on the left, closer to the pubis. The fetal heart rate is 140/min., clear, rhythmic, can be detected on the left, below the navel. Determine the position of the fetus and its type.

- A. First position, anterior type
- B. First position, posterior type
- C. Second position, anterior type
- D. Second position, posterior type
- E. —

33. A 25-year-old woman complains of a 2-month-long menstruation delay and bloody vaginal discharge. Gynecological examination detects that the cervix is "barrel-shaped", the uterus is in *anteflexio*, the body of the uterus is small and painless, the external os allows inserting a fingertip, the appendages are not palpable, the discharge is profuse and hemorrhagic. What is the most likely diagnosis in this case?

- A. Cervical pregnancy
- B. Hydatidiform mole
- C. Cervical cancer
- D. Cervical erosion
- E. Endometriosis

34. A 3-month-old child has been formula-fed since the age of 2.5 months, because the child's mother had no milk. The mother notes that despite her taking a good care of her child, the child developed persistent redness in the skin folds. Three-four days later, the child developed itching and hyperemic skin patches on the cheeks and chin. The patches were filled with serous exudate that formed yellowish scabs after drying. Seborrheic scales are observed on the child's scalp. What is the most likely diagnosis in this case?

- A. Exudative-catarrhal diathesis
- B. Neuro-arthritis diathesis
- C. Lymphatic-hypoplastic diathesis
- D. Allergic (atopic) diathesis
- E. Staphyloiderma

35. Chemical analysis of the water has detected increased concentration of

nitrogen-containing salts, iron and sulfates. What parameter of water quality is most informative in such cases and indicates fresh contamination of water with organic substances of animal origin?

- A. NH_3
- B. NO_2
- C. NO_3
- D. Fe
- E. SO_4

36. A 32-year-old woman complains of dull pain in her lower abdomen, especially before and during a menstruation, and smearing brown discharge observed before a menstruation. Gynecological examination shows that the uterus is dense, enlarged, and painful when moved. The appendages on both sides are normal. What is the most likely diagnosis in this case?

- A. Endometriosis
- B. Uterine fibromyoma
- C. Metroendometritis
- D. Uterine cancer
- E. Ectopic pregnancy

37. A newborn girl has congenital lymphoid edema of her hands and feet, a short neck with lymphoid edema that forms a skin fold, an anti-Mongoloid slant of the eyes, and an epicanthus. Sex chromatin (Barr's body) is absent in her buccal swab. What syndrome is most likely to be diagnosed in this case?

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

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

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

39. A 29-year-old woman complains of infertility and an oligomenorrhea type of

abnormal menstrual cycle. Objectively, she has the height of 160 cm and the body weight of 91 kg, growth of hair is observed on her face and thighs. Bimanual examination detects enlarged dense ovaries 5x6 cm in size on both sides. These data were confirmed by ultrasound. What is the most likely diagnosis in this case?

- A. Sclerocystic ovarian syndrome (Stein-Leventhal)
- B. Ovarian androblastoma
- C. Premenstrual syndrome
- D. Chronic bilateral adnexitis
- E. Adrenogenital syndrome

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

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

41. A 38-year-old man complains of weakness, a fever of $37.8^{\circ}C$, enlarged lymph nodes, nosebleeds, and pain in the bones. Objectively, the skin and mucosa are pale, enlarged and painless lymph nodes can be palpated, sternalgia and hepatosplenomegaly are observed. Complete blood count: erythrocytes — $2.7 \cdot 10^{12}/L$, hemoglobin — 84 g/L, leukocytes — $58 \cdot 10^9/L$, eosinophils — 1%, band neutrophils — 2%, segmented neutrophils — 12%, lymphocytes — 83%, lymphoblasts — 2%, Botkin-Gumprecht cells, ESR — 57 mm/hour. What is the most likely diagnosis in this case?

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

42. 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. Microscopy of the thick drop and blood smear
- B. Biochemical blood test
- C. Serological blood test
- D. Serum bilirubin levels
- E. Serum activity of ALT and AST enzymes

43. A 35-year-old patient complains of intense constant pain in the cardiac region. The patient had a case of influenza one week ago. Objectively, the patient's condition is satisfactory, body temperature — 37.8°C, blood pressure — 130/80 mm Hg, pulse — 88/min., rhythmic. The borders of the heart are unchanged. A biphasic murmur can be heard in the III–IV intercostal space on the left, the heart sounds are sonorous. ECG shows concordant elevation of the ST segment. What is the most likely diagnosis in this case?

- A. Acute pericarditis
- B. Myocarditis
- C. Angina pectoris
- D. Myocardial infarction
- E. Pulmonary thromboembolism

44. A 12-year-old boy has some functional and morphological abnormalities (myopia — 0.5 D). He has no chronic diseases. During the last year, he had 5 cases of respiratory diseases. What health group is it?

- A. Second
- B. First
- C. Third
- D. Fourth
- E. Fifth

45. Because of an accident at the sewage collector, a town risks an outbreak of intestinal infections. What would be the most effective method of water disinfection in this situation?

- A. Hyperchlorination
- B. Double chlorination
- C. Ozonization
- D. Ultraviolet disinfection of water
- E. Chlorination with pre-ammonization

46. 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. Dressler's syndrome
- B. Pulmonary thromboembolism
- C. Sjogren's syndrome
- D. Acute myocarditis
- E. Recurrent myocardial infarction

47. A 36-year-old man complains of nausea, recurrent episodes of vomiting, and pain in the right hypochondrium that radiates into the right shoulder blade. According to the patient's medical history, the symptoms appeared 11 hours ago after excessive consumption of fatty fried foods. Objectively, the patient's tongue is dry and has a white coating. The abdomen is tense and painful during palpation in the right hypochondrium. Positive signs of Ortner, Zakharin, Murphy, and Mussi-Georgievsky can be detected. Pulse — 96/min. Complete blood count: leukocytes — $10.4 \cdot 10^9/L$. What is the most likely diagnosis in this case?

- A. Acute cholecystitis
- B. Acute pancreatitis
- C. Acute gastritis
- D. Intestinal obstruction
- E. Right-sided renal colic

48. A 34-year-old woman complains of pain and stiffness throughout the day in the small joints of her hands and feet, as well as in her knee and ankle joints. According to the patient's medical history, the disease onset was 4 years ago, when she first developed pain and swelling in the small joints of the hands and feet and a fever of 38°C. Six months after the onset of the disease, she developed deformation of the joints in her hands and their limited mobility. Objectively, marked muscle atrophy is observed on the backs of her hands and in her knees and thighs. Blood pressure — 110/65 mm Hg, pulse — 92/min. Blood test results: rheumatoid factor — ++, seromuroid — 0.375 units, CRP — +++. X-ray of the hands reveals osteoporosis, narrowing of the joint spaces, and erosions (usurations) in the wrist joints. What is the most likely diagnosis in this case?

- A.** Rheumatoid arthritis
- B.** Ankylosing spondyloarthritis
- C.** Reactive arthritis
- D.** Osteoarthritis
- E.** Systemic scleroderma

49. An 11-year-old boy complains of frequent nosebleeds and fatigue during walking. Objectively, a lag is observed in the physical development of the lower half of the body. Blood pressure in the arms is increased, while blood pressure in the legs is decreased. The borders of the heart are expanded on the left. A systolic noise is observed in the interscapular region. ECG shows that the axis of the heart is horizontal. Chest X-ray reveals left-sided cardiomegaly and erosions (usurations) of the ribs. What is the most likely diagnosis in this case?

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

50. A 68-year-old patient complains of shortness of breath during physical exertion and cough that produces mucous sputum. The patient has a history of chronic obstructive pulmonary disease. Objectively, auxiliary muscles are involved in the act of breathing, the neck veins distend on inspiration, percussion produces a banbox resonance over the lungs, the respiration is vesicular and weakened. Chest X-ray shows flattening of the diaphragm and a pulmonary pattern with a decreased number of elements. What is the most likely diagnosis in this case?

- A.** Emphysema of the lungs
- B.** Pulmonary edema
- C.** Atelectasis of both lungs
- D.** Bilateral pneumothorax
- E.** Pneumonia

51. A 42-year-old woman has lost her consciousness after physical exertion. Her blood pressure decreased to 40/20 mm Hg. According to the patient's medical history, she has been taking glucocorticoids for a long time (5 years) because of her bronchial asthma. She has not been taking glucocorticoids for the last 4 days. Objectively, the patient is sluggish, her skin is of normal color, her heart sounds are muffled, her pulse is 100/min., rhythmic, of poor volume. Blood glucose levels — 3.0 mmol/L, Na^+ — 117 mmol/L, K^+ — 6.0 mmol/L. What is the most likely diagnosis in this case?

- A.** Acute adrenal insufficiency
- B.** Thyrotoxic crisis
- C.** Cardiogenic shock
- D.** Hypovolemic shock
- E.** Hypoglycemic coma

52. A patient complains of chest pain on the right, shortness of breath, and cough that produces a large amount of purulent sputum. Objectively, cyanosis of the skin is observed, heart rate — 116/min., body temperature — 39.8°C. The right half of the chest lags behind in the act of breathing. Dullness of the percussion sound and weakened breathing can be detected on the right. Chest X-ray shows homogeneous darkening of the right half of the chest. What is the most likely diagnosis in this case?

- A.** Pleural empyema
- B.** Abscess of the right lung
- C.** Right-sided pneumothorax
- D.** Bronchiectasis
- E.** Right-sided exudative pleurisy

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

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

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

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

55. 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. Transient ischemic attack
- B. Cerebral infarction
- C. Intracerebral hemorrhage
- D. Hypertensive encephalopathy
- E. Subdural hemorrhage

56. A 34-year-old woman complains of irritability, tearfulness, unmotivated mood swings, finger tremor, rapid fatigability, irregular menstrual cycle, pigmentation appearing around her eyes, and weight loss (10 kg within the last 4 months). Objectively, the following is observed: heart rate — 110/min., blood pressure — 140/75 mm Hg. The thyroid gland is slightly enlarged on palpation, painless, soft and elastic. Dalrymple, Stellwag, Mobius, and von Graefe signs are positive. What is the most likely diagnosis in this case?

- A. Thyrotoxicosis
- B. Dermatomyositis
- C. Addison's disease
- D. Hypothyroidism
- E. Hyperparathyroidism

57. A 57-year-old man complains of cough with profuse mucopurulent sputum (up to 150 mL per 24 hours). Objectively, he has drumstick fingers with watch-glass nails. Percussion produces a shortened sound over the lungs. Auscultation detects moderate and large bubbling crackles. Complete blood count shows leukocytosis and a left shift in the leukogram. Chest X-ray shows intensified pulmonary pattern and ring-like shadows. Bronchography detects multiple cylindrical thickenings of the bronchi with clear contours. Make the provisional diagnosis.

- A. Bronchiectasis
- B. Pulmonary echinococcosis
- C. Pulmonary cyst
- D. Pulmonary gangrene
- E. Chronic pleural empyema

58. A 30-year-old man complains of petechial hemorrhages that suddenly appeared on the skin of his legs two days ago. Objectively, multiple hemorrhages in the form of asymmetrically located ecchymoses are observed on the skin of his thighs and lower legs. No changes were detected in the internal organs. Complete blood count: hemoglobin — 126 g/L, erythrocytes — $3.9 \cdot 10^{12}/L$, leukocytes — $5.2 \cdot 10^9/L$, platelets — $15 \cdot 10^9/L$. What is the most likely diagnosis in this case?

- A. Idiopathic thrombocytopenic purpura
- B. Hemophilia A
- C. Hemorrhagic vasculitis
- D. DIC syndrome
- E. Meningococemia

59. A 19-year-old girl, registered for regular check-ups for a congenital heart defect, complains of shortness of breath and palpitations during physical exertion. Objectively, her physical development is lagging. Palpation detects trembling at the base of the heart on the left. Auscultation detects a systolo-diastolic murmur in the second intercostal space on the left near the sternum and intensification of the second heart sound over the pulmonary artery. ECG shows signs of left ventricular hypertrophy. Chest X-ray shows an intensified pulmonary pattern and distension and bulging of the pulmonary artery. What is the most likely diagnosis in this case?

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

60. 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. Washed erythrocytes
- B. Fresh citrated blood
- C. Packed erythrocytes (native)
- D. Erythrocyte suspension
- E. Packed erythrocytes depleted of leukocytes and platelets

61. A 50-year-old patient suddenly developed a "piercing" headache, psychomotor agitation, and vomiting during physical exertion. Examination detects positive Kernig's sign and nuchal rigidity, focal symptoms are absent. Blood pressure — 200/120 mm Hg. What is the most likely diagnosis in this case?

- A. Subarachnoid hemorrhage
- B. Subdural hematoma
- C. Cerebral infarction
- D. Encephalitis
- E. Meningitis

62. 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. Scabies
- B. Pediculosis
- C. Syphilis
- D. Psoriasis
- E. Candidiasis

63. A 62-year-old woman complains of pain in her lower abdomen, lower back, and sacrum and profuse whitish liquid discharge being produced from her genital tract. According to the patient's medical history, her menopause lasts for 3 years already. Bimanual examination detects that the uterus is enlarged up to 5–6 weeks of pregnancy, has an uneven surface, and is immobile. The discharge is liquid. Atypical cells were detected in the aspirate from the uterine cavity. The appendages are not palpable. What is the most likely diagnosis in this case?

- A. Cancer of the body of the uterus
- B. Cervical cancer
- C. Uterine fibromyoma
- D. Endometriosis
- E. Ovarian cancer

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

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

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

be suspected in this case?

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

66. A 73-year-old man has a 5-year-long history of benign prostatic hyperplasia. One morning he developed an acute urinary retention. Catheterization of the bladder is impossible in this case. What urgent aid must be provided for this man?

- A. Perform a bladder tap
- B. Prescribe diuretics
- C. Prescribe antispasmodics and analgesics
- D. Prescribe adrenergic blockers
- E. Prescribe thermal procedures

67. A 30-year-old woman lives with a husband diagnosed with typhus. Both of them have an infestation of body lice. What drug must be used for emergency prevention of epidemic typhus in the woman?

- A. Doxycycline
- B. Human immunoglobulin
- C. Live typhus vaccine
- D. Inactivated typhus vaccine
- E. Hyperimmune equine serum

68. Examination of a 9-month-old girl revealed the following: flattened face, Mongoloid slant of the eyes, epicanthus, small auricles, underdeveloped upper jaw, high-arched palate, diastema, enlarged fissured tongue, short neck, transverse crease on both palms, sparse fingerprint whorls, coarctation of the aorta, and marked muscle hypotonia. What is the most likely diagnosis in this case?

- A. Down syndrome
- B. Edwards syndrome
- C. Patau syndrome
- D. Congenital toxoplasmosis
- E. Congenital hypothyroidism

69. A 72-year-old patient came to a doctor with complaints of hand tremors, stiffness, slowness of walking and speech, and difficulties in performing routine household chores. Physical examination detects general bradykinesia, hypomimia, emprosthotonus, "shuffling" gait, hand tremors at rest, D>S, plastic type of increased muscle tone, the "cogwheel rigidity" phenomenon, and marked postural instability. What medicines must be a pri-

mary part of the treatment regimen for this patient?

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

70. 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. Typhoid fever
- B. Typhus
- C. Leptospirosis
- D. Influenza
- E. Pseudotuberculosis

71. A 38-year-old woman complains of throbbing pain in the area of her external genitalia on the right, chills, and a fever of 38.5°C. Objectively, palpation detects a painful tumor-like formation covering the entrance to the vagina in the area of the lower third of the labia majora on the right. Marked edema and hyperemia are observed. What is the most likely diagnosis in this case?

- A. Acute Bartholinitis
- B. Acute vulvitis
- C. Bartholin gland cyst
- D. Fibroma of the vulva
- E. Acute vaginitis

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

- A. Acquired strangulated femoral hernia
- B. Acquired strangulated inguinal hernia
- C. Acquired irreducible femoral hernia
- D. Acquired irreducible inguinal hernia
- E. Inguinal lymphadenitis

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

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

74. In a 5-year-old child, the disease onset was acute, with the child developing a fever of 39.2°C, headache, vomiting, and delirium. On the second day after the onset of the disease, the child developed generalized tonic-clonic seizures, confusion, and hemiparesis. Polymerase chain reaction of the cerebrospinal fluid detects HSV-1 DNA. What etiotropic drug should be prescribed in this case?

- A. Acyclovir
- B. Rimantadine
- C. Oseltamivir
- D. Ceftriaxone
- E. Interferon

75. 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. Myelitis
- C. Erb's palsy
- D. Kerer's paralysis
- E. Thoracic spinal cord injury

76. In a 4-year-old child, the disease onset was acute, with an increase in body temperature and multiple episodes of vomiting. Later, the patient developed tonic-clonic seizures and general hyperesthesia. Objectively, the child is sluggish, nuchal rigidity is observed. Laboratory testing of the cerebrospinal fluid shows the following: the cerebrospinal fluid is turbid, Pandy's reaction — +++, protein — 0.99 g/L, neutrophilic pleocytosis is observed. What is the most likely diagnosis in this case?

- A. Purulent meningitis
- B. Serous meningitis
- C. Brain tumor
- D. Encephalitis
- E. Meningism

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

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

78. A pregnant woman at 32 weeks of gestation with the risk of preterm labor undergoes a treatment to prevent fetal respiratory distress syndrome. What medicine was she prescribed?

- A. Dexamethasone
- B. Gynipral (Hexoprenaline)
- C. Progesterone
- D. Oxytocin
- E. Misoprostol

79. Examination of a 4-day-old baby detected vesicles with seropurulent content on the neck, back of the head, and buttocks. 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 region is normal. What is the most likely diagnosis in this case?

- A. Vesiculopustulosis
- B. Neonatal pemphigus
- C. Miliaria
- D. Phlegmon
- E. Epidermolysis bullosa

80. A 12-year-old girl has the height of 137 cm and the weight of 39.5 kg. It is necessary to draw a conclusion about the degree and proportionality of the girl's physical development, evaluating each parameter in isolation. What method should be used for this purpose?

- A. Sigma deviations
- B. Generalizing
- C. Indices
- D. Evaluation tables
- E. Determining the child's biological age

81. To assess the vitamin component of the students' nutrition status, the capillary resistance test and the tongue test with Tillmans' reagent were performed. In this case, the supply of the body with the following vitamin was tested:

- A. C
- B. A
- C. PP
- D. B₁
- E. B₂

82. 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. Fluorine
- B. Cesium
- C. Nickel
- D. Iodine
- E. Strontium

83. A certain statistical method can be used to study the relation between the duration of smoking and the frequency of malignant lung neoplasms being detected. What method of statistical analysis should be used in this study?

- A. Correlation analysis
- B. Direct standardization
- C. Comprehensive health assessment
- D. Dynamic analysis
- E. Normalization of strongly intensive quantities

84. The characteristics of the microclimate at the industrial premises are as follows: average air temperature — +35°C, radiation temperature — +30°C, relative air humidity — 45%, air velocity — 3.0 m/s. What is the main type of heat transfer in such a microclimate?

- A. Evaporation
- B. Infrared radiation
- C. Convection
- D. Conduction
- E. Convection and conduction

85. Cases of kwashiorkor disease can be often detected in the less economically developed countries among formula-fed infants. What factor causes this disease?

- A.** Deficiency of animal proteins
- B.** Deficiency of fats
- C.** Deficiency of carbohydrates
- D.** Vitamin imbalance
- E.** Mineral imbalance

86. A 7-year-old boy after playing with a cat suddenly developed problems with breathing. Objectively, the boy is pale, frightened, and sits, leaning onto his arms. His body temperature is 36.6°C , heart rate — 120/min., respiration rate — 42/min., speaks in syllables. The exhale is long and accompanied by wheezing. Percussion detects a handbox resonance over the lungs. An inhalation of ventolin (salbutamol) solution was started via a nebulizer. What can help assess the child's need for oxygen therapy in this case?

- A.** Pulse oximetry
- B.** Chest X-ray
- C.** Pneumotachometry
- D.** Spirometry
- E.** Assessment of accessory respiratory muscles involvement

87. 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.** Poliomyelitis
- D.** Peritonsillar abscess
- E.** Encephalitis

88. The condition of a full-term newborn deteriorated on the first day of life. The baby was born from the third pregnancy, during the second half of which gestosis was observed. The mother's blood group is 0(I) Rh(-). Examination shows that the baby is inert and has icteric skin and mucosa; baby's urine and stool are of normal color. Blood serum bilirubin is 248 $\mu\text{mol/L}$, because of indirect bilirubin

levels. What is the most likely cause of this pathologic condition?

- A.** Rh incompatibility
- B.** ABO incompatibility
- C.** Physiological jaundice
- D.** Fetal hepatitis
- E.** Biliary atresia

89. A 30-year-old man, a cable presser, complains of inertness, memory problems, and pain in his limbs. Objectively, he presents with skin pallor, anemia, reticulocytosis, basophilic stippling of erythrocytes, and high levels of porphyrin in urine. This man has the signs of the following disease:

- A.** Saturnism
- B.** Berylliosis
- C.** Mercurialism
- D.** Asbestosis
- E.** Siderosis

90. A medical facility studies the relationship between the age of lactating women who gave birth to children and the amount of breast milk that they produce. What parameter must be calculated to analyze the collected data?

- A.** Correlation coefficient
- B.** Parametric Student's criterion
- C.** Nonparametric Kolmogorov-Smirnov criterion
- D.** Odds ratio
- E.** Relative risk

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

- A.** B
- B.** A
- C.** C
- D.** D
- E.** —

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

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

93. A 28-year-old woman complains of headache, general weakness, elevated body temperature, impaired nasal breathing, and purulent discharge from her left nostril. Anterior rhinoscopy detects hyperemia and edema of the nasal mucosa on the left and pus in the middle nasal meatus. What is the most likely diagnosis in this case?

- A. Maxillary sinusitis
- B. Diphtheria
- C. Sphenoiditis
- D. Acute rhinitis
- E. Posterior ethmoiditis

94. A 52-year-old woman complains of itching in the anus, noticing a small amount of bright red blood on the feces and toilet paper, and pain during the act of defecation. The pain lasts 2–3 hours. She has a history of constipations, the disease onset was 5 years ago. What is the most likely diagnosis in this case?

- A. Chronic anal fissure
- B. Chronic hemorrhoids
- C. Rectal cancer
- D. Rectal polyp
- E. Chronic proctosigmoiditis

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

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

96. Laboratory testing of a batch of vacuum-packaged salted salmon has determined that the histamine levels in this product are 2.8 times higher than the maximum permissible concentration. What type of food poisoning can occur after eating this product?

- A. Scombrototoxicosis
- B. Botulism
- C. Aflatoxicosis
- D. Yersiniosis
- E. Methemoglobinemia

97. A 52-year-old woman developed icteric coloring of the skin and mucosa after a pain attack in the right hypochondrium. Abdominal ultrasound detects concrements in the gallbladder and dilation of the ductus choledochus up to 1.7 cm. The content of the ductus choledochus could not be clearly visualized. What examination method can confirm the diagnosis of choledocholithiasis?

- A. Endoscopic retrograde cholangiography
- B. Survey abdominal X-ray
- C. Computed tomography
- D. Magnetic resonance imaging
- E. Scintigraphy

98. A study of the effectiveness of arterial hypertension treatment using a new drug in comparison with the traditional therapy was conducted. The total of 3,000 people participated in the study. They were divided into two identical groups taking into account their age, sex, stage of the disease, etc. One group was receiving treatment with a new drug, while the other group was undergoing the traditional therapy and was the control group. Study participants did not know which therapy they were receiving. What type of study was it?

- A. Blind randomized controlled study
- B. Case-control study
- C. Prospective cohort study
- D. Double-blind randomized controlled study
- E. Cross-sectional study

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

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

100. 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 — $9.8 \cdot 10^9/L$. 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. Acute pyelonephritis
- B. Acute glomerulonephritis
- C. Systemic lupus erythematosus
- D. Acute prostatitis
- E. Renal tuberculosis

101. A man complains of decreased visual acuity and pain in his right eye and right-sided headache. Objectively, his right eye is red, the cornea is edematous, the anterior chamber is small, the pupil is dilated and unresponsive to light, intraocular pressure — 55 mm Hg. What is the most likely diagnosis in this case?

- A. Acute glaucoma attack
- B. Iridocyclitis
- C. Conjunctivitis
- D. Scleritis
- E. Hemophthalmus

102. An 18-year-old girl complains of pain in her knee and ankle joints and a fever of 38.5°C. She has a history of acute tonsillitis that occurred 2 weeks ago. Objectively, the following is observed: edema of the joints, pain and limited mobility, annular erythema on the torso and proximal parts of the limbs. Auscultation detects the heart rate of 95/min., weakened heart sounds, and a soft systolic murmur over the apex. What is the most likely diagnosis in this case?

- A. Acute rheumatic fever
- B. Systemic scleroderma
- C. Rheumatoid arthritis
- D. Systemic lupus erythematosus
- E. Reactive arthritis

103. Immediately after birth, the baby developed profuse foamy discharge from the mouth and nose, increasing dyspnea, and cyanosis. Objectively, the abdomen is soft and sunken, but slightly distended in the epigastric region. An attempt to insert a nasogastric tube was unsuccessful. What is the most likely diagnosis in this case?

- A. Esophageal atresia
- B. Congenital pyloric stenosis
- C. Atresia of the large intestine
- D. Atresia of the small intestine
- E. Ladd's bands

104. A 65-year-old woman complains of a sudden dyspnea attack, retrosternal pain, hemoptysis, and pain and edema in her left lower leg. Objectively, cyanosis is observed, auscultation detects that the second heart sound is accentuated over the pulmonary artery, pulse — 110/min., blood pressure — 80/40 mm Hg. ECG reveals the McGinn-White sign (S1, Q3, T3), right axis deviation, overload of the right-sided chambers of the heart, and right bundle branch block. D-dimer levels — 10 mcg/mL of blood. What is the most likely diagnosis in this case?

- A. Pulmonary thromboembolism
- B. Spontaneous pneumothorax
- C. Pulmonary infarction
- D. Cardiogenic shock
- E. Pulmonary edema

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

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

106. An 8-year-old girl gains no weight and has a distended abdomen and diarrhea that occurs up to 4–5 times per 24 hours. According to the patient's medical history, the symptoms first appeared at the age of 6 months, after the introduction of complementary food — oatmeal — into her diet. Since then, the child has been experiencing abdominal bloating, diarrhea, and loose stools after eating cereals and products containing flour. Coprology test detects steatorrhea. Fibrogastroduodenoscopy detects subatrophic duodenitis. What is the most likely diagnosis in this case?

- A. Celiac disease
- B. Lactase deficiency
- C. Mucoviscidosis
- D. Pancreatitis
- E. Functional dyspepsia

107. A 5-month-old child presents with nasal discharge, difficulty breathing through the nose, cough, and a fever of 38.2°C . Objectively, the following is observed: expiratory dyspnea with the participation of auxiliary muscles, perioral cyanosis, and nasal flaring. Percussion produces a bandbox resonance over the lungs. Auscultation detects dry wheezes and scattered fine vesicular crackles on both sides. What is the most likely diagnosis in this case?

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

108. A 4-year-old boy has been ill for the five days already. According to the patient's medical history, the disease onset was acute, with the patient developing a fever of 38.4°C , dry cough, rhinitis, and a burning sensation in the eyes. The child is not vaccinated. Objectively, the following is observed: body temperature — 40°C , hacking cough, conjunctivitis, photophobia, and profuse mucous discharge from the nose. A merging maculopapular rash can be observed on the skin of the face and upper chest. What is the most likely diagnosis in this case?

- A. Measles
- B. Rubella
- C. Infectious mononucleosis
- D. Poliomyelitis
- E. Viral hepatitis A

109. A 16-year-old patient complains of aching pain in the epigastric region, sour eructation, and periodic heartburn after eating spicy, sour, or fried foods. Examination detects erosive gastritis with an increased acid-producing function of the stomach. What group of drugs should be prescribed for this patient to regulate the acidity of gastric juice?

- A. Proton pump inhibitors
- B. Histamine H_2 blockers
- C. Selective muscarinic antagonists
- D. Histamine H_1 blockers
- E. Bismuth preparations

110. A 70-year-old patient complains of general weakness, loss of appetite, pain

in the tongue, and paresthesia. According to the patient's medical history, the disease onset was 6 months ago. Objectively, the skin and mucosa are pale and moderately icteric, the tongue is bright red and smooth, hepatomegaly and distal hyperesthesia are observed. Auscultation detects a systolic murmur in all auscultation points. Pulse — 110/min., blood pressure — 90/60 mm Hg. Blood test results: erythrocytes — $1.2 \cdot 10^{12}/\text{L}$, hemoglobin — 56 g/L, color index — 1.4, leukocytes — $2.8 \cdot 10^9/\text{L}$, platelets — $120 \cdot 10^9/\text{L}$, ESR — 26 mm/hour, reticulocytes — 0.1%, macrocytosis, total bilirubin — 34 mmol/L, indirect bilirubin — 29 mmol/L. What is the most likely diagnosis in this case?

- A. Vitamin B_{12} deficiency anemia
- B. Acute lymphoblastic leukemia
- C. Iron deficiency anemia
- D. Infectious mononucleosis
- E. Viral hepatitis A

111. A 32-year-old woman complains of an enlarged second finger of her left hand and an increase in body temperature to 37.5°C . Objectively, the shape of the finger is changed, it cannot bend, its skin is cyanotic. There are fistulas that discharge pus. X-ray reveals osteoporosis of the bones and joints. What form of panaritium is it?

- A. Pandactylitis
- B. Bone panaritium
- C. Joint panaritium
- D. Tendon panaritium
- E. Paronychia

112. A 68-year-old patient complains of weakness and rapid and irregular heart rate. The patient has a 5-year-long history of arterial hypertension. Objectively, the following is observed: blood pressure — 150/95 mm Hg, heart rate — 125/min., pulse — 88/min. Auscultation detects vesicular respiration in the lungs. Percussion detects that the left border of the relative cardiac dullness expands 2 cm outwards from the midclavicular line. The heart sounds are muffled, the rhythm is irregular, no pathological sounds. ECG reveals the following: heart rate — 128/min., QRS — 100 milliseconds, QT — 380 milliseconds, no P waves, varying length of RR intervals. What heart rhythm disorder has developed in this patient?

- A. Atrial fibrillation
- B. Supraventricular extrasystole
- C. Sinus tachycardia
- D. AV nodal tachycardia
- E. Ventricular fibrillation

113. A 35-year-old patient complains of a body weight increase of 27 kg over the course of the last 2 years, weakness, hair loss on the head, and a decreased potency. Objectively, the following is observed: blood pressure — 160/110 mm Hg, height — 174 cm, weight — 104 kg, fat deposition is observed mainly on the neck and torso, the skin is dry and purple-cyanotic. ACTH levels are increased in the blood. Computed tomography detects a microadenoma of the pituitary gland. What is the most likely diagnosis in this case?

- A. Cushing disease
- B. Cushing syndrome
- C. Essential hypertension
- D. Alimentary obesity
- E. Diabetes mellitus

114. A 36-year-old man complains of general weakness, intense thirst, and polyuria. Objectively, his skin, mucosa, and tongue are dry, the borders of the heart remain unchanged, pulse — 78/min. Urinalysis results: specific gravity — 1.006, leukocytes — 2–4 in sight. Blood test results: fasting glucose — 4.8 mmol/L, decreased levels of antidiuretic hormone. What is the most likely diagnosis in this case?

- A. Diabetes insipidus
- B. Diabetes mellitus
- C. Primary hyperaldosteronism
- D. Acute pyelonephritis
- E. Cushing's disease

115. A patient complains of pain, redness, and edema of the lower eyelid of the right eye. Objectively, there is a hyperemic, painful formation with a yellowish tip near the edge of the eyelid, the eyeball is unchanged. What is the most likely diagnosis in this case?

- A. Stye
- B. Chalazion
- C. Blepharitis
- D. Conjunctivitis
- E. Eyelid abscess

116. A 37-year-old woman complains of enlarged cervical and mediastinal lymph nodes. Blood test detects the ESR of 35 mm/hour. Lymph node biopsy detects a granuloma that consists of epithelial giant

cells without caseous necrosis. What is the most likely diagnosis in this case?

- A. Sarcoidosis
- B. Lymph nodes tuberculosis
- C. Infectious mononucleosis
- D. Lymphogranulomatosis
- E. Erythroleukemia

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

- A. *Treponema pallidum* test
- B. Scraping for mycosis
- C. Test for acantholytic cells
- D. Eosinophil count
- E. Bacterial culture

118. The mother of a 4-year-old boy complains of frequent recurrent infections in her son. According to the patient's medical history, at the age of two he had an abscess on the right forearm and he has frequent cases of bacterial rhinosinusitis and pneumonia. Objectively, hypoplasia of the tonsils and lymph nodes is observed. The immunogram is as follows: *IgG* — 0.4 g/L, *IgA* — 0.01 g/L, *IgM* — 0.01 g/L, *emphIgE* — 88 IU/mL. Lymphocyte subpopulations: CD3+ — 90%, CD4+ — 47%, CD8+ — 44%, CD19+ — 0.2%, CD16/56+ — 6%. Molecular genetic study revealed a congenital defect of tyrosine kinase. What is the most likely diagnosis in this case?

- A. Hereditary hypogammaglobulinemia (Bruton's disease)
- B. Wiskott-Aldrich syndrome
- C. DiGeorge syndrome
- D. Hyperimmunoglobulin E syndrome (*IgE*)
- E. Nezelof syndrome

119. On day 4 of life, a healthy newborn baby developed melena and vomiting blood. Coagulogram reveals prolonged prothrombin time, reduced prothrombin index, and deficiency of plasma factors II–VII–IX and X. Hemorrhagic disease of the newborn was diagnosed. What drug should be prescribed for this child?

- A. Vitamin K
- B. Heparin
- C. Ethamsylate
- D. Vitamin C
- E. Vitamin D

120. A 35-year-old woman was hospitalized after an attack of intense abdominal pain that occurred suddenly after minor physical exertion. During the examination, the woman lies motionless on a stretcher and speaks reluctantly, because during the conversation the pain intensifies. The abdomen is tense on palpation. There are positive signs of peritoneal irritation in all abdominal regions. Abdominal X-ray detects air under the dome of the diaphragm. What is the most likely diagnosis in this case?

- A. Perforated ulcer of the stomach or duodenum
- B. Intestinal obstruction
- C. Tuberculous peritonitis
- D. Strangulated internal abdominal hernia
- E. Appendicular abscess

121. 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. Diphtheria
- C. Submandibular lymphadenitis on the left
- D. Acute periodontitis
- E. Tumor of the left palatine tonsil

122. An 11-year-old girl complains of pain in her abdomen and joints and a fever of 38.5°C . According to the patient's medical history, she has been ill for 3 days already. Objectively, the following is observed: cyanotic-tinted hyperemia of the face and neck, clearly demarcated pink-cyanotic coloring of the hands and feet, large macular rash around the knee joints, hepatosplenomegaly. Complete blood count revealed neutrophilic leukocytosis, eosinophilia, and an accelerated ESR. What is the most likely diagnosis in this

case?

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

123. An 89-year-old man presents with ischemic heart disease, stable exertional angina pectoris (functional class II), and essential hypertension (stage 2, degree 2). He continuously takes lisinopril, bisoprolol, aspirin, and rosuvastatin. The patient complains that he has developed dry cough that occurs mainly in the morning. What medicine has caused the cough?

- A. Lisinopril
- B. Bisoprolol
- C. Aspirin
- D. Rosuvastatin
- E. —

124. A 38-year-old man complains of general weakness, shortness of breath, cough, and tachycardia. According to the patient's medical history, 10 days ago he had a fever of 38°C , chills, and difficulty breathing through the nose. Auscultation detects weakened heart sounds and wet crackles in the lower segments of the lungs. Body temperature — 36.8°C . ECG reveals low voltage of R waves and a first-degree AV block. What is the most likely diagnosis in this case?

- A. Acute myocarditis
- B. Acute myocardial infarction
- C. Acute pericarditis
- D. Mitral insufficiency
- E. Pulmonary thromboembolism

125. A 27-year-old woman complains of a rash that appeared in her axillary region. According to the patient's medical history, the disease onset was 5 days ago. Examination detects soft painful nodules covered with reddened skin in the axillary region. Some of the nodules are perforated, forming an opening that discharges pus. Some of the nodules merge together. Palpation provokes tenderness in the area of the nodules. The general body temperature is elevated to 37.5°C . What is the most likely diagnosis in this case?

- A. Hidradenitis
- B. Furunculosis
- C. Erythrasma
- D. Atopic dermatitis
- E. Scabies

126. A 38-year-old man complains of an

ulcer that appeared in the area of the head of his penis one week ago. The patient observes no subjective sensations in the ulcer. Objectively, there is an erosion 1 cm in diameter in the area of the head of the penis. Slight lamellar compaction is observed in the ulcer. There are no noticeable inflammatory phenomena. The ulcer has smooth edges and the color of "raw meat". What is the most likely diagnosis in this case?

- A. Primary syphilis
- B. Genital herpes
- C. Leishmaniasis
- D. Scabies
- E. Trichomoniasis

127. 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. Kandinsky-Clerambault syndrome
- B. Obsessive-compulsive disorder
- C. Verbal hallucinosis
- D. Manic syndrome
- E. Paraphrenic syndrome

128. A 29-year-old patient complains of shortness of breath during moderate physical exertion and rapid heart rate. According to the patient's medical history, the patient had frequent cases of acute tonsillitis. Palpation of the chest detects pulsation in the III–V intercostal spaces on the left and in the epigastric region, as well as diastolic tremor over the apex of the heart. Auscultation detects intensified first heart sound at the apex of the heart and a diastolic murmur. The second heart sound reduplicates and is intensified over the pulmonary artery. What is the most likely diagnosis in this case?

- A. Mitral stenosis
- B. Aortic insufficiency
- C. Pulmonary artery stenosis
- D. Aortic stenosis
- E. Mitral insufficiency

129. A 52-year-old man periodically develops a brief (2–3 minutes) constricting feeling behind the sternum, accompanied by dyspnea, when walking. During

such an attack, the patient slows down or stops walking. This constricting feeling first occurred approximately one month ago. The patient has a history of essential hypertension and diabetes mellitus and smokes 1–2 packs of cigarettes per day. What is the most likely diagnosis in this case?

- A. Angina pectoris
- B. Myocardial infarction
- C. Acute myocarditis
- D. Acute pericarditis
- E. Mitral stenosis

130. The influence of risk factors on the development of atherosclerosis in patients of different ages was being researched in a study. What kind of risk factor is the patient's age?

- A. Uncontrolled endogenous
- B. Controlled exogenous
- C. Uncontrolled exogenous
- D. Controlled social
- E. Controlled endogenous

131. A 45-year-old patient complains of dry cough, hemoptysis, shortness of breath during physical exertion, general weakness, and excessive sweating. Objectively, percussion detects dullness between the patient's shoulder blades on the right. Auscultation detects broncho-vesicular breathing and fine wet vesicular crackles in this area after coughing. Chest X-ray shows a non-homogeneously darkened upper pulmonary lobe with a clear lower contour and a ring-shaped lucency 2.5 cm in size at the level of the second rib. Blood test results: leukocytes — $12.5 \cdot 10^9/L$, ESR — 35 mm/hour. What is the most likely diagnosis in this case?

- A. Infiltrative tuberculosis
- B. Pneumonia
- C. Pleurisy
- D. Lung abscess
- E. Bronchial asthma

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

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

133. 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 A
- B.** Leptospirosis
- C.** Infectious mononucleosis
- D.** Typhoid fever
- E.** Viral hepatitis C

134. A 42-year-old man complains of a spot that appeared on his left arm and transformed into a pustule with a black bottom over the course of 24 hours. The patient is a farmer. Objectively, his arm is noticeably edematous, the pustule is painless when touched and is surrounded by a rim of daughter vesicles on its periphery. Body temperature — 39.7°C , blood pressure — 90/60 mm Hg, pulse — 110/min. What is the most likely diagnosis in this case?

- A.** Anthrax
- B.** Brucellosis
- C.** Tularemia
- D.** Plague
- E.** Nonspecific lymphadenitis

135. A patient developed diplopia after recovering from a case of an acute respiratory viral infection. Objectively, convergent strabismus is observed on the right and the patient cannot move the right eyeball outwards. What cranial nerve is damaged in this patient?

- A.** Right abducens nerve
- B.** Left abducens nerve
- C.** Right oculomotor nerve
- D.** Left trochlear nerve
- E.** Right optic nerve

136. A newborn baby has icteric skin. According to the mother's medical history, her first pregnancy was discontinued via a medical abortion at the term of 6 weeks. The mother's blood group is A(II), Rh(-). The child's blood group is A(II), Rh(+). Biochemical profiling of the umbi-

lical cord blood revealed bilirubin levels of 82 $\mu\text{mol/L}$, four hours later — 130 $\mu\text{mol/L}$. What is the most likely diagnosis in this case?

- A.** Hemolytic disease of the newborn
- B.** Biliary atresia
- C.** Physiological jaundice
- D.** Hemorrhagic disease of the newborn
- E.** Congenital hepatitis

137. A 27-year-old woman has been hospitalized into the psychiatric inpatient department. In the past, she underwent two courses of treatment at a psychiatric hospital because of her hallucinatory-paranoid symptoms. During the examination, she is tense and reluctant to communicate. However, she reports that she "hears a voice in her head", which she interprets as "the voice of her double from a parallel world". She believes that her children and husband were "replaced with their doubles" and is hostile towards them. Her thinking is paralogical and inconsistent. She is emotionally monotonous, her volitional impulses are reduced. What is the most likely diagnosis in this case?

- A.** Schizophrenia, paranoid subtype
- B.** Major depressive disorder
- C.** Bipolar disorder, mixed episode
- D.** Oneiroid syndrome
- E.** Reactive paranoid psychosis

138. After a fall, the woman complains of pain in her hip joint during movements and inability to fully rest her weight on this leg. The pain intensifies during palpation. Objectively, the limb is rotated outwards and shortened. The patient is unable to raise her straight leg and hold it in this position. When she bends her leg, the heel slides on the surface. What is the most likely diagnosis in this case?

- A.** Femoral neck fracture
- B.** Transtrochanteric femoral fracture
- C.** Subtrochanteric femoral fracture
- D.** Diaphyseal femur fracture
- E.** Rupture of the capsular ligament apparatus of the hip joint

139. A 67-year-old woman complains of weakness in her arms, heaviness in her legs, and twitching in the muscles of her limbs. According to the patient's medical history, the disease onset was approximately 10 months ago, when she first developed weakness in her arms. Objectively, marked hypotrophy is observed in the arm muscles, as well as diffuse muscle fasciculations in the limbs, mainly in the arms. A muscle strength decrease that reaches 2 points is

observed in the arms, while in the legs the muscle strength is preserved. Deep reflexes are significantly overactive in the limbs. Foot clonus is observed on both sides. Babinski's pathological reflex is observed on both sides. There were no sensory or coordination disorders detected, as well as no pelvic organ dysfunction. What is the most likely diagnosis in this case?

- A. Amyotrophic lateral sclerosis
- B. Spinal muscular atrophy
- C. Myasthenia
- D. Tuberculous meningitis
- E. Syphilitic meningoencephalitis

140. A 69-year-old man complains of a blood pressure increase up to 150/90 mm Hg. The patient has a history of benign prostatic hyperplasia. What medicine should be prescribed for this patient to correct his blood pressure?

- A. Doxazosin
- B. Verapamil
- C. Nifedipine
- D. Lisinopril
- E. Propranolol

141. A 50-year-old patient complains of pain in his bones and especially ribs. Complete blood count: erythrocytes — $3.3 \cdot 10^{12}/L$, hemoglobin — 100 g/L, leukocytes — $6.5 \cdot 10^9/L$, segmented neutrophils — 50%, lymphocytes — 32%, monocytes — 18%, ESR — 62 mm/hour. Skull X-ray shows multiple small regular-shaped defects. Plasma cells make up 30% of sternal punctate. What is the most likely diagnosis in this case?

- A. Multiple myeloma
- B. Ankylosing spondylitis
- C. Systemic lupus erythematosus
- D. Von Willebrand disease
- E. Acute lymphoblastic leukemia

142. A 32-year-old man came to a doctor on day 5 after the onset of the disease. He complains of a fever of $39.8^{\circ}C$, headache, pain in the calf muscles, pain in the back, and lumbar pain. Objectively, the face is hyperemic, the sclera is icteric, hemorrhages are observed on the skin of the torso and limbs. The patient presents with hepatosplenomegaly. The sign of costovertebral angle tenderness is positive. Diuresis — 450 mL. What is the most likely diagnosis in this case?

- A. Leptospirosis
- B. Brucellosis
- C. Typhus
- D. Infectious mononucleosis
- E. Measles

143. A 42-year-old man complains of a lack of pain and thermal sensitivity in his left arm and in the left half of his chest, which causes him to receive burns that take a very long time to heal. According to the patient's medical history, the symptoms started without any apparent cause and have been increasing throughout the last 5 years. Neurological examination revealed a segmental dissociated sensory disturbance in $C_3 - Th_7$ segment on the left. What is the most likely diagnosis in this case?

- A. Syringomyelia
- B. Spinal ischemic stroke
- C. Amyotrophic lateral sclerosis
- D. Left-sided total brachial plexitis
- E. Dermatomyositis

144. During physical exertion, a 28-year-old man suddenly developed dyspnea, weakness, palpitations, and chest pain on the right that was radiating into the right shoulder. Objectively, his condition is severe, tachycardia — 100/min., respiratory rate — 28/min. The right half of the chest lags behind in the act of breathing. Percussion produces a tympanic sound over the lungs on the right. Respiratory sounds cannot be auscultated. Body temperature — $36.7^{\circ}C$. What is the most likely diagnosis in this case?

- A. Spontaneous pneumothorax
- B. Myocardial infarction
- C. Lung abscess
- D. Empyema of the pleural cavity
- E. Mediastinitis

145. 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. Deep vein thrombosis
- C. Furuncle
- D. Lymphangitis
- E. Lymphadenitis

146. During the transfusion of 400 mL

of packed erythrocytes, a 35-year-old man developed general anxiety, short-term agitation, lumbar and retrosternal pain, dyspnea, cyanosis, and tachycardia of 110/min. His blood pressure decreased to 90/40 mm Hg. What is the most likely diagnosis in this case?

- A. Hemotransfusion shock
- B. Massive transfusion syndrome
- C. Pulmonary thromboembolism
- D. Citrate intoxication
- E. Allergic reaction

147. 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. Nonspecific ulcerative colitis
- B. Pseudomembranous colitis
- C. Irritable bowel syndrome
- D. Crohn's disease
- E. Intestinal polyposis

148. 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. Intussusception
- B. Intestinal duplication
- C. Tumor of the abdominal cavity
- D. Helminth infestation
- E. Enterocystoma

149. A 54-year-old man complains of pain and a tumor-like formation that appeared in his right inguinal region. The formation becomes larger during walking and lowers into the scrotum, but disappears when the patient lies down. Palpation detects widening of the external ring of the patient's right inguinal canal. What is the most likely diagnosis in this case?

- A. Right-sided oblique reducible inguinal hernia
- B. Right-sided strangulated hernia
- C. Right-sided hydrocele testis
- D. Right-sided inguinal lymphadenitis
- E. Right-sided direct inguinal hernia

150. A 50-year-old man complains of palpitations, irregular heart rate, and retrosternal pain attacks that occur during significant physical exertion. Objectively, his heart sounds are muffled and arrhythmic, heart rate — 100/min., blood pressure — 150/90 mm Hg. ECG shows single ventricular extrasystoles. What medicines should be prescribed in this case?

- A. β -blockers
- B. ACE inhibitors
- C. Diuretics
- D. Calcium antagonists
- E. Long-acting nitrates