

Sample test questions

Krok 2 *Medicine*



1. A patient with Morgagni-Adams-Stokes syndrome has fainted when walking up the stairs. The skin is pale, the pupils are dilated, tonic spasms are observed, rib cage is immobile. Make the diagnosis:

- A. Clinical death
- B. Social death
- C. Preagony
- D. Agony
- E. Biological death

2. A 32-year-old welder complains of weakness and fever. His illness initially presented as tonsillitis one month earlier. On examination: temperature - 38.9°C , respirations - 24/min., pulse - 100/min., blood pressure - 100/70 mm Hg, hemorrhages on the legs, enlargement of the lymph nodes. Complete blood count shows Hb- 70 g/L, RBC- $2.2 \cdot 10^{12}/\text{L}$, WBC- $3.0 \cdot 10^9/\text{L}$ with 32% of blasts, 1% of eosinophiles, 3% of bands, 36% of segments, 20% of lymphocytes, and 8% of monocytes, ESR- 47 mm/hour. What is the cause of anemia in this case?

- A. Acute leukemia
- B. Chronic lympholeukemia
- C. Aplastic anemia
- D. B_{12} -deficient anemia
- E. Chronic hemolytic anemia

3. After a 5-day-long celebration of his daughter's wedding a 65-year-old patient "saw" in his yard many cats, chickens, and rats. He tried to chase them away, but was scared off when the animals started scolding him and tried to harm him. What is the likely diagnosis?

- A. Delirium tremens
- B. Senile psychosis
- C. Schizophrenia
- D. Organic brain syndrome
- E. Reactive hallucinosis

4. 5 weeks after hypothermia a 22-year-old patient developed fever, weakness, muscle pain, inability to move independently. Objectively: tenderness, induration of shoulder and shin muscles, restricted active movements, erythema on the anterior surface of the chest. There is a periorbital edema with heliotropic erythema. Gottron's sign is present. What investigation is required for the diagnosis verification?

- A. Muscle biopsy
- B. Aminotransferase activity
- C. Pneumoarthrography
- D. ASO titer
- E. Rheumatoid factor

5. During physical exertion a man suddenly developed acute chest pain on the right and dyspnea. Objectively he assumes forced half-sitting position in the bed, presents with diffuse cyanosis, resting tachypnea of 38/min., the right side of the thorax is enlarged and does not participate in the respiratory process; percussion on the right reveals tympanic

resonance and absence of respiration. What is the most likely diagnosis in this case?

- A. Spontaneous pneumothorax
- B. Hemothorax
- C. Lobar pneumonia
- D. Pulmonary embolism
- E. Acute pleurisy

6. A 34-year-old man on the 3rd day of ceftriaxone treatment for acute otitis (daily dosage - 2 grams) developed diarrhea occurring 5-6 times per day. Feces are without mucus or blood admixtures. Temperature is 36.6°C . Gregersen reaction (occult blood in feces) is negative. Stool culture detected no pathogenic germs. What is the most likely cause of diarrhea in this case?

- A. Antibiotic-associated diarrhea
- B. Intestinal dysbiosis
- C. Bacterial overgrowth syndrome
- D. Ulcerative colitis
- E. Crohn's disease (regional enteritis)

7. A 24-year-old patient visited a doctor complaining of enlargement of his submaxillary lymph nodes. Objectively: submaxillary, axillary and inguinal lymph nodes are enlarged. Chest X-ray shows: enlarged lymph nodes of mediastinum. Blood test: erythrocytes - $3.4 \cdot 10^{12}/\text{L}$, Hb- 100 g/L, blood colour index - 0.88, platelets - $190 \cdot 10^9/\text{L}$, leucocytes - $7.5 \cdot 10^9/\text{L}$, eosinophiles - 8%, band neutrophils - 2%, segmented neutrophils - 67%, lymphocytes - 23%, ESR - 22 mm/hour. What test must be prescribed to verify the cause of lymphadenopathy?

- A. Open biopsy of the lymph nodes
- B. Abdominal US
- C. Mediastinum tomography
- D. Puncture biopsy of the lymph nodes
- E. Sternal puncture

8. A 37-year-old woman complains of headaches, nausea, vomiting, spasms. The onset of the disease occurred the day before due to her overexposure to cold. Objectively: fever up to 40°C ; somnolence; rigid neck; Kernig's symptom is positive on the both sides; general hyperesthesia. Blood test: leucocytosis, increased ESR. Cerebrospinal fluid is turbid, yellow-tinted. What changes of the cerebrospinal fluid are most likely?

- A. Neutrophilic pleocytosis
- B. Lymphocytic pleocytosis
- C. Blood in the cerebrospinal fluid
- D. Xanthochromia in the cerebrospinal fluid
- E. Albuminocytological dissociation

9. A 44-year-old patient complains of difficult urination, sensation of incomplete urinary bladder emptying. Sonographic examination of the urinary bladder near the urethra entrance revealed an oval well-defined hyperechogenic formation 2x3 cm large that was changing its position during the

examination. What conclusion can be made?

- A. Stone
- B. Malignant tumour of the urinary bladder
- C. Urinary bladder polyp
- D. Prostate adenoma
- E. Primary ureter tumour

10. A 25-year-old woman complains of fatigue, dizziness, hemorrhagic rashes on the skin. She has been presenting with these signs for a month. Blood test: erythrocytes - $1.0 \cdot 10^{12}/L$, Hb- 37 g/L, colour index - 1.1, leukocytes - $1.2 \cdot 10^9/L$, platelets - $42 \cdot 10^9/L$. What analysis would be the most advisable for diagnosis-making in this case?

- A. Sternal puncture (bone marrow biopsy)
- B. Splenic biopsy
- C. Liver biopsy
- D. Coagulation studies
- E. US of the gastrointestinal tract

11. A 35-year-old man complains of rapidly increasing fatigue, palpitations, "visual snow", dizziness. He has a history of peptic ulcer of the stomach. Objectively the skin is pale. Vesicular respiration is observed in the lungs. Systolic murmur is detected over the cardiac apex, heart rate is 100/min., BP is 100/70 mm Hg. The epigastrium is slightly tender on palpation. Blood test: erythrocytes - $3.2 \cdot 10^{12}/L$, Hb- 100 g/L, color index - 0.94. What type of anemia is the most likely present in this case?

- A. Posthemorrhagic anemia
- B. Sideroblastic anemia
- C. Iron-deficiency anemia
- D. Hemolytic anemia
- E. Hypoplastic anemia

12. A 35-year-old patient has been suffering from an illness for 3 days. 5 days ago he returned from a trip to Africa. The onset of disease was accompanied by fever up to $40^{\circ}C$, chills, acute headache, myalgia. In the axillary region the lymph node enlarged up to 3×6 cm can be palpated. The lymph node is dense, intensely painful, slightly mobile, without clear margins; the skin over the node is hyperemic and tight. Tachycardia is present. Make the preliminary diagnosis:

- A. Plague
- B. Sepsis
- C. Tularemia
- D. Lymphadenitis
- E. Anthrax

13. A 52-year-old patient, who has been suffering from angina pectoris, for 2 weeks has increasingly frequent pain attacks in the area behind his sternum and his need for nitroglycerine has increased. Objectively: the condition is of moderate severity. The skin is pale. Heart sounds are weakened, rhythmic. Heart rate is 84/min. ECG shows no signs of focal myocardial injury. What is the most likely diagnosis?

- A. Progressive angina pectoris
- B. First-time angina pectoris
- C. Stable NYHA functional class II angina pectoris
- D. Variant angina pectoris
- E. Acute cardiac infarction

14. During appointment with the doctor a man complains of painful itching rashes that appeared on his skin under the beard and moustache one year ago, with frequent exacerbations occurring throughout the year. Objectively the skin of the facial hair growth areas is bluish-purple, thickened, with pustules, erosions, and scabs covering its moist surface. The fistulous tracts are surrounded by the area of loose pink-red granulation and discharge pus. The skin resembles mulberry in appearance. Make the diagnosis:

- A. Sycosis
- B. Acne rosacea
- C. Lupus erythematosus
- D. Deep trichophytosis
- E. Tuberculous lupus

15. A 60-year-old man presents with ischemic heart disease and heart failure of the IV class according to NYHA (New York Heart Association) that manifests as dyspnea at rest. There are moist crackles in the patient's lungs. Liver +4 cm, lower limbs are swollen. Ejection fraction is 25%. What sign is the most indicative when determining functional class of heart failure according to NYHA?

- A. Degree of dyspnea
- B. Moist crackles in the lungs
- C. Swollen lower limbs
- D. Decrease of ejection fraction
- E. Extent of liver enlargement

16. 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. Streptomycin
- B. Isoniazid
- C. Rifampicin
- D. Pyrazinamide
- E. Vitamin C

17. A 39-year-old man complains of morning headaches, appetite loss, nausea, morning vomiting, periodic nasal hemorrhages. The patient had a case of acute glomerulonephritis at the age of 15. Examination revealed rise of arterial pressure up to 220/130 mm Hg, skin hemorrhages on his arms and legs, pallor of skin and mucous membranes. What biochemical parameter is the most important for making diagnosis in this case?

- A. Blood creatinine
- B. Blood bilirubin
- C. Blood sodium
- D. Uric acid
- E. Fibrinogen

18. The doctor has an appointment with a patient, who 2 days ago developed severe chest pain on the left, general weakness, high temperature, and headache. Objectively along the 4th and 5th intercostal nerves on the left the skin is hyperemic and there are tight clusters of small vesicles filled with clear serous content. What is the most likely diagnosis?

- A. Herpes zoster
- B. Herpes simplex
- C. Streptococcal impetigo
- D. Pemphigus
- E. Dermatitis herpetiformis (Duhring's disease)

19. For a week a 42-year-old patient has been suffering from fever attacks followed by high temperature, which occur every 48 hours. Body temperature raises up to 40°C and decreases in 3-4 hours with excessive sweating. The patient presents with loss of appetite and general fatigue. The skin is pale and sallow. The liver and spleen are enlarged and dense on palpation. What method of diagnosis verification would be most efficient?

- A. Microscopy of blood smear and thick blood film
- B. Complete blood count
- C. Bacteriological analysis
- D. Immune-enzyme assay
- E. Microscopy of hanging blood drop

20. A 28-year-old patient is a drug addict. He has been sick for a year, when noticed general weakness, increased sweating, and weight loss. He often had cases of respiratory diseases. Within the last 2 days he demonstrates intermittent fever with profuse night sweating, increased general weakness, developed diarrhea with mucus and blood admixtures. On examination: polylymphadenopathy, herpetic rashes in the oral cavity; on abdominal palpation: the liver and spleen are enlarged. What is the most likely diagnosis?

- A. HIV-infection
- B. Herpetic stomatitis
- C. Chronic lymphatic leukemia
- D. Colon cancer
- E. Chronic sepsis

21. 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 - $15,0 \cdot 10^9/l$, 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. Pneumonia complicated by an abscess
- B. Infiltrative tuberculosis
- C. Peripheral pulmonary cancer
- D. Cystic echinococcosis
- E. Pulmonary cyst

22. A 16-year-old adolescent living in a rural area has been bitten in the shin by a stray dog. The wound is superficial. Regular vaccination against tetanus was received 3 months ago. What treatment tactics would be the most advisable in this case?

- A. Antirabies vaccination
- B. Antirabies immunoglobulin
- C. Tetanus toxoid adsorbed
- D. Antitetanus serum
- E. Antitetanus immunoglobulin

23. A 48-year-old patient was found to have diffuse enlargement of the thyroid gland, exophthalmia, weight loss of 4 kg in 2 months, sweating. Objectively: HR- 105/min, BP- 140/70 mm Hg. Defecation act is normal. What kind of therapy is recommended in this case?

- A. Mercazolil
- B. Radioactive iodine
- C. Propranolol
- D. Lugol's solution
- E. Thyroxine

24. A 26-year-old woman is suspected to suffer from systemic lupus erythematosus with systemic lesions of skin, vessels, joints, serous tunics, and heart tissue that developed after photosensitization. The following is detected in blood analysis: LE cells, antibodies to native ds-DNA, isolated anti-centromere antibodies, rheumatoid factor is 1:100, Wassermann reaction is positive, circulating immune complex is 120 units. What immunological indicators are considered to be specific to this disease?

- A. ds-DNA antibodies
- B. Rheumatoid factor
- C. Anti-centromere antibodies
- D. Immunoglobulin A
- E. Increased circulating immune complex

25. A woman came to a doctor with complaints of increased body temperature up to 37,8°C and moderately sore throat for the last 3 days. Objectively: mandibular lymph nodes are enlarged up to 3 cm. Palatine tonsils are hypertrophied, with gray coating that spreads to the uvula and anterior pillars of the fauces. What is the most likely diagnosis?

- A. Oropharyngeal diphtheria
- B. Infectious mononucleosis
- C. Pseudomembranous (Vincent's) tonsillitis
- D. Agranulocytosis
- E. Oropharyngeal candidiasis

26. A group of 5 had been resting in a forest,

they were drinking alcohol and eating canned mushrooms and cured fish. The next day two of them were hospitalized with disturbed vision, swallowing and respiration; the third one presented with acute general weakness and dry mouth. The remaining two were healthy. A tick was detected on the skin of one of the healthy group members. What is the most likely diagnosis?

- A. Botulism
- B. Tick-borne encephalitis
- C. Alcohol poisoning
- D. Mushroom poisoning
- E. Lyme borreliosis

27. A 23-year-old man complains of facial edema, headache, dizziness, low urinary output, urine discoloration (dark red). These complaints arose after the patient had had a case of acute tonsillitis. On examination there are facial edema, the skin is pale, temperature is 37.4°C ; heart rate is 86/min., blood pressure is 170/110 mm Hg. Heart sounds are muffled, the II heart sound is accentuated over the aorta. What etiological factor is the most likely in this case?

- A. Beta-hemolytic streptococcus
- B. Staphylococcus aureus
- C. Streptococcus viridans
- D. Streptococcus pyogenes
- E. Staphylococcus saprophyticus

28. A 65-year-old man was diagnosed with B_{12} -deficient anemia and the treatment was prescribed. A week later control blood test was performed. What would be the early indicator of the therapy effectiveness?

- A. Increased number of reticulocytes
- B. Increased hemoglobin level
- C. Megaloblastic hematopoiesis
- D. Normoblastic hematopoiesis
- E. Increased erythrocyte number

29. A 35-year-old woman complains of heart pain ("aching and drilling") occurring mainly in the morning in autumn and spring and irradiating to the neck, back and abdomen; rapid heartbeat; low vitality. Occurrence of this condition is not associated with physical activity. In the evening, the patient's condition improves. Study of somatic and neurological status and ECG reveal no pathology. What pathology is most likely to have caused these clinical presentations?

- A. Somatization depression
- B. Resting stenocardia
- C. Pseudoneurotic schizophrenia
- D. Neurocirculatory asthenia
- E. Hypochondriacal depression

30. An 18-year-old young man complains of pain in his knee and elbow joints and body temperature up to 39.5°C . One week and a half earlier developed sore throat. On examination his body temperature is 38.5°C . Swelling of

the knee and elbow joints is observed. Pulse is 106/min., rhythmic. Blood pressure is 90/60 mm Hg. Cardiac borders are unchanged, heart sounds are weakened, at the cardiac apex there is soft systolic murmur. What factor would be the most indicative of the likely disease etiology?

- A. Anti-streptolysin O
- B. C-reactive protein
- C. Creatine kinase
- D. Rheumatoid factor
- E. Seromucoid

31. A 45-year-old man complains of cough fits and tickling in his nasopharynx. He had been staying for 10 days in the polluted area created by the Chernobyl nuclear power plant accident. Rhinoscopy shows signs of severe nasopharynx irritation. What radionuclide is the cause of this irritation?

- A. Radioactive iodine
- B. Radioactive cesium
- C. Radioactive strontium
- D. Radioactive plutonium
- E. Radioactive cobalt

32. A 20-year-old patient complains of severe headache, double vision, weakness, fever, irritability. Objectively: body temperature is 38.1°C , the patient is reluctant to contact, sensitive to stimuli. There are ptosis of the left eyelid, exotropia, anisocoria S>D, pronounced meningeal syndrome. On lumbar puncture the cerebrospinal fluid flowed out under a pressure of 300 mm Hg, the fluid is clear, slightly opalescent. 24 hours later there appeared fibrin film. Protein - 1.4 g/L, lymphocytes - 600/3 per mm^3 , sugar - 0.3 mmol/L. What is the provisional diagnosis?

- A. Tuberculous meningitis
- B. Meningococcal meningitis
- C. Lymphocytic (Armstrong's) meningitis
- D. Syphilitic meningitis
- E. Mumps meningitis

33. A 32-year-old woman complains of increasing spastic pains in her lower abdomen that occur after emotional stress. Bowel movements are intermittent: 2-3 defecations after waking in the morning alternate with constipations that last for 1-2 days. Objectively body mass is retained, palpation of the sigmoid colon is moderately painful. Hb- 130 g/L, leukocytes - 5.2 g/L, ESR- 9 mm/hour. Rectoromanoscopy is painful due to spastic condition of the intestine, intestinal mucosa is without changes. Intestinal lumen contains large amounts of mucus. What is the most likely diagnosis in this case?

- A. Irritable bowel syndrome
- B. Crohn's disease (regional enteritis)
- C. Nonspecific ulcerative colitis
- D. Acute mesenteric ischemia
- E. Malabsorption syndrome

34. A 37-year-old worker during a fire ended up in the area of high CO concentration. He was delivered to a hospital in unconscious state. Objectively: the skin of his face and hands is crimson. Respiration rate is 20/min. ECG: alterations specific for hypoxic myocardium. Hourly diuresis is 40 ml. Blood test: erythrocytes - $4.5 \cdot 10^{12}/L$, Hb- 136 g/L, color index - 0.9, ESR- 3 mm/hour, carboxyhemoglobin - 5%. What criterion allows determining the severity of the patient's condition?

- A.** Carboxyhemoglobin concentration
- B.** Respiratory disorders
- C.** ECG results
- D.** Extent of trophic disorders
- E.** Development of chronic renal failure

35. A patient with suspected pheochromocytoma has normal blood pressure in the periods between the attacks and a tendency towards tachycardia. Urine test revealed no pathologies. It was decided to use a provocative test with histamine. What medication should be prepared to provide emergency care in case of positive test result?

- A.** Phentolamine
- B.** Pipolphen
- C.** Nifedipine
- D.** Mesatonum
- E.** Prednisolone

36. A 46-year-old woman complains of severe 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. Plain abdominal X-ray reveals no pathologic shadows. Ultrasound detects a hyperechogenic mass 1.5 cm in diameter, which reflects sound wave, in the enlarged right renal pelvis. What diagnosis is the most likely?

- A.** Renal calculus
- B.** Benign renal tumor
- C.** Renal cyst
- D.** Renal tuberculosis
- E.** Malignant renal tumor

37. A 60-year-old woman complains of unbearable pain in her right subcostal area. She has a history of acute pancreatitis. Temperature is $38.2^{\circ}C$. Objectively her sclera are icteric. There are no signs of peritoneal irritation. Ortner's and Gubergrits' symptoms are positive. Urine diastase is 320 U/L. What is the most likely diagnosis?

- A.** Exacerbation of chronic pancreatitis
- B.** Acute cholangitis
- C.** Chronic cholecystitis
- D.** Acute cholecystitis
- E.** Pancreatic cancer

38. A 64-year-old man complains of cough with expectoration consisting of blood-streaked mucus, dyspnea, low grade fever and general

fatigue. He has been presenting with these symptoms for 3 months. He has been smoking since early adolescence. Objectively t° is $37.4^{\circ}C$, respirations are 26/min., pulse is 82/min., rhythmic, blood pressure is 130/85 mm Hg. The right side of the thorax lags behind in the respiratory process, dull percussion sound and acute decrease of breathing activity are observed there. X-ray shows homogeneous shadow of the lung field on the right with mediastinum displacement towards the affected side. What is the most likely diagnosis?

- A.** Central lung cancer
- B.** Exudative pleuritis
- C.** Pleuropneumonia
- D.** Pulmonary tuberculosis
- E.** Multiple bronchiectasis

39. A 42-year-old woman complains of severe pulsing headache in the frontoparietal area, vertigo, palpitations. She has been suffering from hypertension for 3 years. Significant increase of BP occurs 2-3 times per month and lasts for 3-8 hours. The left ventricle is enlarged, heart sounds are clear, heart rate - 105/min., BP- 225/115 mm Hg. ECG: signs of left ventricular hypertrophy. What drug would be the most effective for termination of cerebral crisis attack?

- A.** Labetalol
- B.** Hydrochlorothiazide (Hypothiazide)
- C.** Captopril
- D.** Losartan
- E.** Clonidine (Clophelin)

40. A 45-year-old patient complains of pain in the epigastric region, left subcostal area, abdominal distension, diarrhea, loss of weight. He has been suffering from this condition for 5 years. Objectively: the tongue is moist with white coating near the root; deep palpation of abdomen reveals slight pain in the epigastric region and Mayo-Robson's point. Liver is painless and protrudes by 1 cm from the costal arch. Spleen cannot be palpated. What disease can be primarily suspected?

- A.** Chronic pancreatitis
- B.** Atrophic gastritis
- C.** Peptic stomach ulcer
- D.** Chronic cholecystitis
- E.** Chronic enteritis

41. For 4 days a 35-year-old man has been treated in the resuscitation unit for acute renal failure caused by compartment syndrome. The patient is disoriented. ECG shows high T waves and right ventricular extrasystoles. His central venous pressure is 159 mmH₂O; for the last 3 hours auscultation has been detecting isolated moist crackles in the lungs. Respirations are 32/min. Blood test: residual nitrogen - 62 mmol/L, K^{+} - 7.1 mmol/L, Cl^{-} - 78 mmol/L, Na^{+} - 120 mmol/L, Ht- 0.32 L/L, Hb- 100 g/L, blood creatinine - 0.9 mmol/L. In this case the most advisable would be to

perform:

- A. Hemodialysis
- B. Plasmatorption
- C. Hemosorption
- D. Plasmafiltration
- E. Ultrafiltration

42. For three years a 31-year-old woman has been complaining of pain and swelling of her radiocarpal and metacarpophalangeal articulations, their reduced mobility in the morning, which persisted up to 1,5 hours. Two weeks ago she developed pain, swelling, and reddening of her knee joints, her body temperature increased up to $37,5^{\circ}\text{C}$. The treatment was belated. Examination of the internal organs revealed no pathologic alterations. Diagnosis of rheumatoid arthritis was made. What alterations are the most likely to be visible on the arthrogram?

- A. Joint space narrowing, usuration
- B. Joint space narrowing, subchondral osteosclerosis
- C. Cysts in the subchondral bone
- D. Numerous marginal osteophytes
- E. Epiphyseal osteolysis

43. A 55-year-old woman, a cook, complains of pain in her right knee joint that has been troubling her for a month and intensifies in the evening. Objectively she is overweight, the knee joint is swollen, creaks during movement, palpation reveals localized pain. The 1st metatarsophalangeal articulation is deformed on the both feet. No changes in blood and urine are detected. What should be visible on the patient's X-ray?

- A. Joint space narrowing, marginal osteophytes
- B. Osteoporosis, joint space narrowing, singular usurations
- C. Joint space narrowing, multiple usurations, subluxations
- D. Epiphyseal erosions, bony ankylosis
- E. Joint space narrowing, round bone defects

44. A 52-year-old woman has been suffering for 2 years from dull, occasionally exacerbating pain in her right subcostal area, occurring after eating high-fat foods, bitter taste in her mouth in the morning, constipations, and flatulence. Objectively she has excess weight, her body temperature is $36,9^{\circ}\text{C}$; there is a coating on the root of her tongue; the abdomen is moderately distended and painful in the area of gallbladder projection. What examination would be the most helpful for diagnosis-making?

- A. Ultrasound
- B. Duodenal intubation
- C. Cholecystography
- D. Duodenoscopy
- E. Liver scanning

45. A 57-year-old woman complains of weakness, dyspnea, loss of appetite, and liquid feces. She has been suffering from this

condition for 2 years. Objectively she presents with pale skin, subicteric sclera, and bright-red fissured tongue. Lymph nodes are not enlarged. Pulse - 100/min. BP- 105/70 mm Hg. Liver +3 cm, the spleen cannot be palpated. Blood test: erythrocytes - $1,2 \cdot 10^{12}/\text{L}$, Hb- 56 g/L, color index - 1.4, macrocytes, leukocytes - $2,5 \cdot 10^9/\text{L}$, eosinophils - 1%, juvenile - 1%, metamyelocytes - 1%, band neutrophils - 8%, segmented neutrophils - 47%, lymphocytes - 38%, monocytes - 4%, reticulocytes - 0.1%, platelets - $100 \cdot 10^9/\text{L}$, ESR- 30 mm/hour, indirect bilirubin - 26 mmol/L. What changes can be expected in the bone marrow puncture material?

- A. Prevalence of megaloblasts
- B. Increased number of sideroblasts
- C. Erythroid hyperplasia
- D. Presence of blast cells
- E. Prevalence of lymphoid tissue

46. A 58-year-old woman complains of spontaneous bruises, weakness, bleeding gums, dizziness. Objectively: the mucous membranes and skin are pale with numerous hemorrhages of various time of origin. Lymph nodes are not enlarged. Ps- 100/min, BP- 110/70 mm Hg. There are no alterations of internal organs. Blood test results: RBC- $3,0 \cdot 10^{12}/\text{l}$, Hb- 92 g/l, color index - 0,9, anisocytosis, poikilocytosis, WBC- $10 \cdot 10^9/\text{l}$, eosinophils - 2%, stab neutrophils - 12%, segmented neutrophils - 68%, lymphocytes - 11%, monocytes - 7%, ESR- 12 mm/h. What laboratory test should be performed additionally to make the diagnosis?

- A. Platelets
- B. Reticulocytes
- C. Clotting time
- D. Osmotic resistance of erythrocytes
- E. Fibrinogen

47. A 45-year-old woman complains of paroxysmal intolerable facial pain on the left with attacks that last for 1-2 minutes. Attacks are provoked by chewing. The disease onset was two month ago after overexposure to cold. Objectively: pain at the exit points of the trigeminal nerve on the left. Touching near the wing of nose on the left induces new pain attack with tonic spasm of the facial muscles. What is the most likely diagnosis among those listed?

- A. Trigeminal neuralgia
- B. Glossopharyngeal neuralgia
- C. Temporomandibular joint arthritis
- D. Facial migraine
- E. Maxillary sinusitis

48. A 28-year-old man complains of skin rash and itching on the both of his hands. The condition persists for 1,5 years. The exacerbation of his condition he ascribes to the occupational contact with formaldehyde resins. Objectively: lesion foci are symmetrically localized on both hands.

Against the background of erythema with blurred margins there are papulae, vesicles, erosions, crusts, and scales. What is the most likely pathology?

- A. Occupational eczema
- B. Idiopathic eczema
- C. Allergic dermatitis
- D. Simple contact dermatitis
- E. Erythema multiforme

49. A 25-year-old patient was delivered to an infectious diseases unit on the 3rd day of illness with complaints of headache, pain in lumbar spine and gastrocnemius muscles, high fever, chill. Objectively: condition of moderate severity. Scleras are icteric. Pharynx is hyperemic. Tongue is dry with dry brown coating. Abdomen is distended. Liver is enlarged by 2 cm. Spleen is not enlarged. Palpation of muscles, especially gastrocnemius muscles, is painful. Urine is dark in colour. Stool is normal in colour. The most likely diagnosis is:

- A. Leptospirosis
- B. Viral hepatitis type A
- C. Malaria
- D. Infectious mononucleosis
- E. Yersiniosis

50. A 28-year-old woman complains of skin hemorrhages after minor traumas and spontaneous appearance of hemorrhages on the front of her torso and extremities. On examination: the skin is variegated (old and new hemorrhages), bleeding gums. Blood platelets - $20 \cdot 10^9/L$; in the bone marrow there is increased number of megakaryocytes and no platelet production. Treatment with steroid hormones was effective. What is the likely diagnosis?

- A. Idiopathic thrombocytopenic purpura
- B. Hemophilia
- C. Rendu-Osler-Weber disease (Hereditary hemorrhagic telangiectasia)
- D. Disseminated intravascular coagulation
- E. Acute vascular purpura

51. A 46-year-old man notes swollen legs, weakness, sensation of fullness and heaviness in the right subcostal area; it is the first occurrence of these signs in the patient. The patient has 20-year-long history of rheumatoid arthritis. The liver and spleen are enlarged and dense. Blood creatinine - 0,23 mmol/l, proteinemia - 68 g/l, cholesterol - 4,2 mmol/l, urine specific gravity - 1012, proteinuria - 3,3 g/l, isolated wax-like cylinders, leached erythrocytes in the vision field, leukocytes - 5-6 in the vision field. What is the most likely complication?

- A. Renal amyloidosis
- B. Chronic glomerulonephritis
- C. Acute glomerulonephritis
- D. Heart failure
- E. Chronic pyelonephritis

52. A 23-year-old patient had taken 1 g of aspirin to treat acute respiratory infection. After that he developed an asthmatic fit with labored expiration that was arrested by introduction of aminophylline. The patient's medical history is not burdened with allergies. The patient has undergone two surgeries for nasal polyposis in the past. What diagnosis is most likely?

- A. Aspirin-induced asthma
- B. Atopic bronchial asthma
- C. Infectious allergic bronchial asthma
- D. Exercise-induced asthma
- E. Symptomatic bronchospasm

53. A 36-year-old man has been complaining of marked weakness, low appetite, and nausea for the last year, year and a half. Within the last year he has lost 10 kg of body mass. The skin is darkened, especially on his face, neck, and arms. Skin folds and nipples are hyperpigmented, there are pigment spots on the patient's inner thighs. Pulse is 60/min., blood pressure is 80/50 mm Hg. What is the provisional diagnosis?

- A. Adrenal insufficiency
- B. Diabetes mellitus
- C. Chronic gastritis
- D. Hemochromatosis
- E. Cholestatic hepatitis

54. A 45-year-old man developed constricting retrosternal pain that occurs during walks at the distance of 200 m. Objectively heart rate is 80/min., BP is 160/90 mm Hg. During cardiopulmonary exercise test at 50 W there is a depression of S-T segment by 3 mm below the isoline in V3-V4. What is the provisional diagnosis?

- A. Exertional angina pectoris, functional class III
- B. Exertional angina pectoris, functional class IV
- C. Exertional angina pectoris, functional class II
- D. Somatoform autonomic dysfunction, hypertension type
- E. Alcoholic myocardiodystrophy

55. For the last 15 years a 48-year-old patient has been working at the factory producing synthetic resins. Lately he has been complaining of significant general fatigue, headaches, frequent urination (predominantly during the day), red color of urine. What complication of benzene nitrocompounds poisoning can be suspected?

- A.** Malignant tumor of the urinary bladder
- B.** Chronic cystitis
- C.** Chronic prostatitis
- D.** Acute glomerulonephritis
- E.** Chronic pyelonephritis

56. A 44-year-old patient with postinfarction cardiosclerosis presents with frequent heart rate disorders and lower extremity edema. Objectively: Ps- 95/min., irregular, 10-12 extrasystoles per minute. BP- 135/90 mm Hg. The 1st heart sound at the apex is weakened. Pulmonary respiration is rough. The liver is enlarged +2 cm. ECG: irregular sinus rhythm, heart rate - 95/min., frequent polytopic ventricular extrasystoles. What antiarrhythmic drug is advisable in this case for treatment and prevention of extrasystole?

- A.** Amiodarone
- B.** Lidocaine
- C.** Mexiletine
- D.** Quinidine
- E.** Novocainamide (Procainamide)

57. A 60-year-old woman started feeling weakness, vertigo, rapid fatigability during the last year. Recently she has developed dyspnea and paresthesia observed. Objectively: skin and mucous membranes are pale and icteric. Lingual papillae are smoothed out. Liver and spleen are at the edge of costal arch. Blood test: Hb- 70 g/L, erythrocytes - $1.7 \cdot 10^{12}/L$, blood color index - 1.2, macrocytes. What drug can be prescribed on pathogenetic grounds?

- A.** Vitamin B_{12}
- B.** Vitamin B_6
- C.** Ascorbic acid
- D.** Iron preparations
- E.** Vitamin B_1

58. After excessive consumption of fatty food a 60-year-old woman suddenly developed pain in her right subcostal area, nausea, bile vomiting, sharp bitter taste in her mouth. In 2 days she developed jaundice, her urine darkened. Objectively: sclera and skin are icteric, the abdomen is distended, the liver is enlarged by 3 cm, soft and painful on palpation, Ortner's, Murphy's, Kehr's, Zakharyin's, Mayo-Robson's signs are positive. What diagnostic technique should be used in the first place to confirm the diagnosis?

- A.** Ultrasound of the gallbladder and bile duct
- B.** Fibrogastroduodenoscopy
- C.** Abdominal X-ray
- D.** Radionuclide scanning of the liver and gallbladder
- E.** Laparoscopy

59. A 30-year-old woman complains of increased body weight and problems with physical exertion. Her parents are of increased body weight as well; typical meals in their family are high in fats and carbohydrates. Objectively her blood pressure is 135/80 mm Hg, pulse is 89/min., weight is 87 kg, height is

165 cm. The patient's skin is clear, with even distribution of subcutaneous fat; the thyroid gland is not enlarged; there are no menstrual cycle disturbances. What obesity prevention methods would be the most advisable in this case?

- A.** Dietary treatment, graduated exercise
- B.** Intensive training regimen
- C.** Gastroplasty or gastrojejunal shunt
- D.** Inhibitors of gastrointestinal lipases
- E.** Anorectic drugs

60. A 57-year-old woman complains of a sensation of esophageal compression, palpitations, difficult breathing when eating solid food, occasional vomiting with a full mouth, "wet pillow" sign at night for the last 6 months. Objectively: body temperature - $39^{\circ}C$, height - 168 cm, weight - 72 kg, Ps- 76/min, BP- 120/80 mm Hg. X-ray study revealed considerable dilation of esophagus and its constriction in the cardiac part. What pathology is the most likely to have caused dysphagia in this patient?

- A.** Achalasia cardiaea
- B.** Primary esophageal spasm
- C.** Hiatal hernia
- D.** Esophageal carcinoma
- E.** Reflux esophagitis

61. A 43-year-old woman complains of pain in the lumbar area, which irradiates to her left leg and aggravates on movement, and sensation of numbness in this leg. Objectively palpation of her shin and thigh is painful, there are painful stretch symptoms of on the left and gastrocnemius cramps. There is no sensory loss or weakening of reflex responses. Make the diagnosis:

- A.** Vertebrogeous lumbar ischialgia on the left
- B.** Vertebrogeous radicular syndrome of L5-S1 on the left
- C.** Left-sided coxitis
- D.** Endarteritis of the lower extremities
- E.** Spinal stroke

62. A patient with chronic pancreatitis complains of diarrhea occurring up to 5 times per day (no blood traces), loss of body weight, abdominal distention, dryness of skin, loss of hair, thirst, bleeding gums, convulsions. Complete blood count: leukocytes - $5.8 \cdot 10^9/L$; Hb- 86 g/L; ESR- 15 mm/g; Blood protein test: total protein - 48 g/L; albumins - 28 g/L. What indicators of coprological analysis would accompany this syndrom?

- A.** Steatorrhea, creatorrhea
- B.** Large amount of mucus, amyloorrhea
- C.** Large amount of starch grains and cellulose
- D.** Gas bubbles, acid reaction
- E.** Large numbers of iodophilous microbes

63. A 35-year-old patient complains of heartburn, gaseous and sour eructation, burning constricting pain behind the sternum

and along the esophagus, developing when bowing the torso to the front. No previous examination; the patient takes almagel at his own discretion, after which he notes improvement of his general state. Make the provisional diagnosis:

- A.** Gastroesophageal reflux disease
- B.** Functional dyspepsia
- C.** Cardiospasm
- D.** Ulcer disease of the stomach
- E.** Ulcer disease of the duodenum

64. A 34-year-old man is being treated for schizophrenia exacerbation in a psychiatric unit. Objectively: the patient remains in bed, is sluggishly mobile, unresponsive, does not react to questions. His position is unvaried, hypomimic, snout reflex and Dupre's symptom are present, muscles exhibit waxy flexibility. He has been remaining in this state for approximately a week. Feeding is parenteral. Determine the neuromotor disturbance:

- A.** Catatonic stupor
- B.** Depressive stupor
- C.** Psychogenic stupor
- D.** Anergic stupor
- E.** Exogenic stupor

65. After overexposure to cold a 45-year-old woman developed acute pain in her suprapubic and lumbar areas during urination, sharp pains at the end of urination, false urges to urinate. Urine is turbid with blood streaks. The doctor suspects urinary tract infection. What results of laboratory analysis would be the most indicative of such infection?

- A.** Leukocyturia, gross hematuria
- B.** Gross hematuria
- C.** Increased blood creatinine and blood urea
- D.** Daily proteinuria under 3.0
- E.** Daily proteinuria over 3.0

66. A 35-year-old patient developed an epileptic attack with tonic spasms that lasted for 3 minutes. After the attack the patient fell asleep but in 5 minutes the second attack occurred. The first step of emergency aid would be to:

- A.** Ensure patency of airways
- B.** Take blood from the vein for analysis
- C.** Introduce diazepam intravenously
- D.** Prescribe antiepileptic drugs
- E.** Administer chloral hydrate via enema

67. A 23-year-old woman has been suffering from a mental disease since the age of 18, the course of disease has no remission periods. At a hospital the patient mostly presents with non-purposeful foolish excitation: she makes stereotypic grimaces, exposes herself, publicly masturbates with a loud laughter, repeats stereotypical abusive shouts. The patient should be prescribed:

- A.** Neuroleptics
- B.** Antidepressants
- C.** Tranquilizers
- D.** Nootropics
- E.** Mood stabilizers

68. A young woman suffering from seborrhea oleosa has numerous light-brown and white spots on the skin of her torso and shoulders. The spots have clear margins, branny desquamation, no itching. What provisional diagnosis can be made?

- A.** Pityriasis versicolor
- B.** Torso dermatophytosis
- C.** Seborrheic dermatitis
- D.** Pityriasis rosea
- E.** Vitiligo

69. A man came to an urologist with complains of painful urination, discharge from urethra. The patient has been suffering from this condition for a week. Objectively: hyperemic urinary meatus, edema, purulent discharge. Microscopy of smears detected gram-negative bacteria. Specify the diagnosis:

- A.** Acute gonorrheal urethritis
- B.** Trichomonas urethritis
- C.** Candidal urethritis
- D.** Chlamydial urethritis
- E.** Chronic gonorrhoea

70. 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.** Paranoid schizophrenia
- B.** Depressive episode
- C.** Catatonic episode
- D.** Organic delirium
- E.** Acute reaction to stress

71. A 35-year-old woman has gained 20 kg weight within a year with the normal diet. She complains of chills, sleepiness, shortness of breath. The patient's mother and sister are corpulent. Objectively: height - 160 cm, weight - 92 kg, BMI- 35,9. Obesity is uniform, there are no striae. The face is amimic. The skin is dry. The tongue is thickened. Heart sounds are muffled. HR- 56/min, BP- 140/100 mm Hg. The patient has been suffering from amenorrhea for 5 months, has constipations. TSH- 28 mIU/l (norm is 0,32-5). Craniogram shows no pathology. What is the etiology of obesity?

- A. Hypothyroid
- B. Hypo-ovarian
- C. Hypothalamic-pituitary
- D. Alimentary and constitutive
- E. Hypercorticoid

72. A patient complains of painless "sores" on his penis and inguinal lymph nodes enlargement. Synthomycin emulsion that the patient have been applying to the "sores" was ineffective. Objectively: on the inner leaf of the foreskin there are three closely situated rounded erosions, 0,5 cm in diameter, with dense infiltration that can be palpated at their bases. Make the preliminary diagnosis:

- A. Primary syphilis
- B. Herpes simplex (*Herpes pro genitalis*)
- C. Candidiasis of the inner leaf of the foreskin
- D. Shingles
- E. Erythema multiforme

73. A 19-year-old student was urgently hospitalized due to marked dyspnea and chest pain on the left. Her body temperature is 38.8°C. She has been presenting with these signs for 3 days. Respiratory rate is 42/min., shallow. Percussion sound is dull to the left from the center of the scapula, no respiration can be auscultated. The left heart border is displaced outwards by 3 cm. Embryocardia and heart rate of 110/min are observed. Palpation of the right subcostal area is painful. What urgent measures should be taken in this case?

- A. Urgent thoracocentesis
- B. Prescription of penicillin antibiotics
- C. Administration of furosemide
- D. Administration of cardiac glycosides
- E. Referral into thoracic surgery unit

74. A 48-year-old man complains of fatigue, excessive sweating, severe skin itching, undulant fever, enlarged cervical and supraclavicular lymph nodes. Objectively: paleness of skin and mucosa, cervical lymph nodes are mobile, dense, elastic, walnut-sized, painless, not attached to the skin. Complete blood count: erythrocytes - $3,0 \cdot 10^{12}/l$, Hb- 100 g/l, leukocytes - $14 \cdot 10^9/l$, eosinophils - 6%, basophils - 3%, band neutrophils - 11%, segmented neutrophils - 69%, lymphocytes - 7, monocytes - 4%, platelets - $280 \cdot 10^9/l$, ESR- 37 mm/hour. What method should be applied to verify the diagnosis?

- A. Lymph node biopsy
- B. Sternal puncture
- C. Muscle biopsy
- D. Chest X-ray
- E. Lumbar puncture

75. A 72-year-old man complains of lower extremity edema, sensation of heaviness in the right subcostal area, dyspnea in rest. For over 25 years he has been suffering from COPD. Objectively: orthopnea, jugular venous distention, diffuse cyanosis, acrocyanosis.

Barrel chest is observed, on percussion there is vesiculotympanic (bandbox) resonance, sharply weakened vesicular respiration on both sides, moist crepitant crackles in the lower segments of the lungs. Heart sounds are weakened, the II heart sound is accentuated over the pulmonary artery. The liver is +3 cm. What complicated the clinical course of COPD in this patient?

- A. Chronic pulmonary heart
- B. Pulmonary embolism
- C. Acute left ventricular failure
- D. Diffuse pneumosclerosis
- E. Community-acquired pneumonia

76. A 72-year-old man with pneumonia complains of marked dyspnea, chest pain, severe cough with expectoration, t^o is 39.5-40°C, no urination for a whole day. Objectively the patient is conscious. Respiratory rate is 36/min. Over the right lower pulmonary lobe percussion sound is dull; on auscultation there is bronchial respiration and numerous moist crackles. Blood pressure is 80/60 mm Hg. Heart rate is 120/min. Heart sounds are muffled, there is tachycardia. What tactics should the family doctor choose in the management of this patient?

- A. Hospitalization into intensive care unit
- B. Outpatient treatment
- C. Treatment in the day patient facility
- D. Hospitalization into pulmonology unit
- E. Hospitalization into neurology unit

77. After the contact with chemicals a plant worker has suddenly developed stridor, voice hoarseness, barking cough, progressing dyspnea. Objective examination reveals acrocyanosis. What is the provisional diagnosis?

- A. Laryngeal edema
- B. Laryngeal carcinoma
- C. PATE
- D. Pulmonary atelectasis
- E. Pneumothorax

78. A 58-year-old man complains of general weakness, loss of 10 kg of weight within 1,5 months, progressive pain in the lumbar region, increased blood pressure up to 220/160 mm Hg, low grade fever. Objectively: in the right hypochondrium deep palpation reveals a formation with uneven surface and low mobility; veins of the spermatic cord and scrotum are dilated. Blood test results: Hb- 86 g/l, ESR- 44 mm/h. Urine test results: specific gravity - 1020, protein - 0,99 g/l, RBC cover the whole field of vision, WBC- 4-6 in the field of vision. What is the provisional diagnosis?

- A. Renal tumour
- B. Urolithiasis
- C. Acute pyelonephritis
- D. Acute glomerulonephritis
- E. Nephroptosis

79. Anamnesis of a 30-year-old patient

includes closed thoracic injury. Lately the patient has been suffering from increasing dyspnea, sensation of heaviness in the right subcostal area, and heart rate disturbances. Objectively: acrocyanosis, bulging cervical veins, ascites, edema of the lower extremities. Heart auscultation reveals muffled heart sounds, additional III heart sound is detected. Provisional diagnosis of constrictive pericarditis was made. What diagnostic technique would **NOT** confirm the diagnosis?

- A. US of abdomen
- B. Computer tomography
- C. Echocardiography
- D. Magnetic resonance imaging
- E. Chest X-ray

80. A 72-year-old woman suffers from diabetes mellitus type II, concomitant diseases are stage II hypertension and stage IIB heart failure. She takes metformin. Hypertensive crisis had occurred the day before, after which the patient developed extreme weakness, myalgias, thirst, dry mouth, polyuria. BP is 140/95 mm Hg, heart rate is 98/min., no edemas or smell of acetone detected. What measures should be taken to prevent development of comatose state in the patient?

- A. Stop metformin, prescribe short-acting insulin
- B. Double the dosage of metformin
- C. Apply hypotonic solution of sodium chloride
- D. Additionally prescribe long-acting insulin
- E. Prescribe glibenclamide

81. Survey radiograph of a 52-year-old worker of an agglomeration plant (28-year-long record of service, the concentration of metal dust is 22-37 mg/m³) shows mildly pronounced interstitial fibrosis with diffused contrasting well-defined small nodular shadows. The patient has no complaints. Pulmonary function is not compromised. What is the provisional diagnosis?

- A. Siderosis
- B. Silicosis
- C. Anthraco-silicatosi
- D. Silicatosi
- E. Anthracosis

82. A 59-year-old patient suffering from hypertension was delivered to the hospital with complaints of acute headache, nausea, recurrent vomiting. On examination she presents with acute meningeal symptom complex. BP is 185/105 mm Hg. What additional examination would you recommend to the patient in the first place?

- A. Lumbar puncture
- B. Ventriculopuncture
- C. Echoencephalography
- D. Rheoencephalography
- E. Electroencephalography

83. A 36-year-old man complains of marked

dyspnea and cardiac pain. He ascribes his disease to the case of influenza that he had 2 weeks ago. Objectively he leans forward when sitting. The face is swollen, cyanotic, cervical veins are swollen. Heart borders are extended on the both sides, heart sounds are muffled, heart rate = Ps = 118/min., BP is 90/60 mm Hg. Blood test: ESR is 16 mm/hour. ECG shows low voltage. X-ray shows trapezoidal cardiac silhouette and signs of pulmonary congestion. Choose the treatment tactics:

- A. Pericardial puncture (pericardiocentesis)
- B. Diuretics
- C. Antibiotics
- D. Pericardectomy
- E. Glucocorticosteroids

84. A 53-year-old woman complains of weight loss up to 10 kg within the last 2 years, liquid foul-smelling stool two times a day that poorly washes off the toilet, periodic bouts of nausea, girdle pain in the upper abdomen. Objectively: pain in Gubergrits zone (on the right from navel) and at Mayo-Robson's point. Biochemical blood analysis: glucose - 3,2 mmol/l, bilirubin - 16,5 mcmmol/l, crude protein - 56,4 g/l. Urine diastase/amylase - 426 g/h/l. D-xylose test (oral administration of 25 g of d-xylose) after 5 hours reveals 3 g of xylose in urine. The most likely diagnosis is:

- A. Pancreatitis. Malabsorption syndrome
- B. Pseudomembranous colitis
- C. Nonspecific ulcerative colitis
- D. Irritable bowel syndrome
- E. Chronic gastritis

85. A 15-year-old teenager has undergone medical examination in military recruitment center. The following was revealed: interval systolic murmur at the cardiac apex, accent of the II heart sound over the pulmonary artery, tachycardia. What additional examination method will be the most informative for determining diagnosis?

- A. Echocardiography
- B. Electrocardiography
- C. X-ray
- D. Phonocardiography
- E. Rheography

86. A 25-year-old patient is not married and has sexual relations with several partners. During the last 3 months he noticed small amount of mucoserous secretions produced from urethra. Subjectively: periodical itching or burning pain in urethra. Two months ago pain in knee joint developed. Possibility of trauma or exposure to cold is denied by the patient. During the last week eye discomfort is noted - lacrimation and itching. What provisional diagnosis can be suggested?

- A. Reactive arthritis
- B. Rheumatoid arthritis
- C. Seasonal pollinosis
- D. Bacterial nonspecific urethral conjunctivitis
- E. URTI with conjunctiva and joints affected

87. A 19-year-old woman complains of severe pain in the axillary crease. Condition onset occurred a week ago after her swimming in a cold river and epilation. The next day a painful "boil" appeared. The "boil" was increasing in size every day and became a plum-sized tumor. Upon examination there are nodular conical growths joined together detected, the skin covering them is bluish-red in color. Some nodules have fistulous openings producing thick purulent mass. Body temperature is $38,5^{\circ}\text{C}$, general malaise. What is the most likely diagnosis?

- A. Hydradenitis
- B. Carbuncle
- C. Cutaneous tuberculosis
- D. Necrotizing ulcerative trichophytosis
- E. Pyoderma chancriformis

88. A woman complains of weight gain, chills, edema, xeroderma, somnolence, difficulties with focusing. Objectively: height is 165 cm; weight is 90 kg; body proportions are of female type, t° - $35,8^{\circ}\text{C}$, heart rate - 58/min., BP- 105/60 mm Hg. Heart sounds are weakened, bradycardia is observed. Other internal organs have no alterations. Thyroid gland cannot be palpated. Milk secretion from mammary glands is observed. Hormone test revealed increased levels of thyroid-stimulating hormone (TSH) and prolactin, and decreased level of thyroxine (T_4). What is the cause of obesity?

- A. Primary hypothyroidism
- B. Secondary hypothyroidism
- C. Prolactinoma
- D. Hypopituitarism
- E. Adiposogenital dystrophy

89. During hemotransfusion the patient developed nausea, tremor, lumbar and retrosternal pain. On examination the skin is hyperemic, later developed pallor; the patient presents with hyperhidrosis, labored respiration, pulse is 110/min., BP is 70/40 mm Hg. Urine is black colored. What complication developed in the patient?

- A. Posttransfusion shock
- B. Acute renal failure
- C. Pulmonary embolism
- D. Anaphylactic shock
- E. Hypotonic crisis

90. A 22-year-old man suddenly developed extreme weakness, nausea, vomiting with traces of blood. The patient is known to suffer from peptic ulcer disease of duodenum and hemophilia A. Objectively: heart rate - 102/min., BP- 100/60 mm Hg. Complete blood count: erythrocytes - $3,2 \cdot 10^{12}/\text{l}$, Hb- 98 g/l,

color index - 0,92, leukocytes - $7,4 \cdot 10^9/\text{l}$, platelets - $240 \cdot 10^9/\text{l}$, ESR- 11 mm/hour. What measure would most effectively decrease hemorrhaging in this case?

- A. Cryoprecipitate
- B. Aminocaproic acid
- C. Native plasma
- D. Direct transfusion of donor blood
- E. Platelet concentrate transfusion

91. A 28-year-old woman complains of nausea, stomachache, pain in her tongue, and liquid feces. Three days ago she ate poorly salted pike caviar. Objectively her skin is pale, the tongue looks "lacquered" (bald tongue). Pulse is 100/min., with muffled heart sounds and systolic murmur over the cardiac apex. Blood pressure is 95/50 mm Hg. The liver is enlarged by 3 cm. Hemogram shows anemia, eosinophils - 18%. Oval helminth eggs were detected in feces. Make the provisional diagnosis:

- A. Diphyllobotriasis
- B. Trichinosis
- C. Teniasis
- D. Taeniarhynchosis
- E. Ascariasis

92. A 51-year-old woman complains of headache, trembling, paresthesiae, palpitations, increased blood pressure up to 280/160 mm Hg. The day before she experienced exhausting headache, vascular pulsation, palpitations, asphyxia, stomachache, unbearable fear of coming death. The patient paled and broke out in cold sweat. In urine there is increased content of vanillylmandelic acid. What disease causes such clinical presentation in the patient?

- A. Pheochromocytoma
- B. Conn's syndrome (primary hyperaldosteronism)
- C. Cushing's syndrome
- D. Primary hypertension
- E. Cushing's disease

93. A 26-year-old patient with affective bipolar disorder has developed a condition manifested by mood improvement, behavioural and sexual hyperactivity, verbosity, active body language, reduced need for sleep. Which of the following drugs would be most effective in this case?

- A. Neuroleptics with sedative effect
- B. Antidepressants with activating effect
- C. Neuroleptics with activating effect
- D. Tranquilizers
- E. Antidepressants with sedative effect

94. A 19-year-old patient complains of dyspnea on exertion. He often has bronchitis and pneumonia. Since childhood the patient presents with cardiac murmur. Auscultation revealed splitting of the II sound above the pulmonary artery, systolic murmur in the 3rd intercostal space at the left sternal border. ECG detected right bundle branch block.

What is the provisional diagnosis?

- A. Atrial septal defect
- B. Open ductus arteriosus
- C. Aortarctia
- D. Aortic stenosis
- E. Mitral insufficiency

95. A 37-year-old man suffers from attacks of unconsciousness, dyspnea during physical exertion, periodical sensations of heart rate disorder. Father of the patient died suddenly at the age of 45. Objectively: heart rate is 90/min., BP is 140/90 mm Hg. On heart US: ejection fraction - 55%, significant myocardium thickening of the left ventricle and interventricular septum. What drug should be prescribed for the treatment?

- A. Bisoprolol
- B. Enalapril
- C. Phenyhydinum (Nifedipine)
- D. Hydrochlorothiazide
- E. Furosemide

96. A 60-year-old man complains of discomfort when swallowing solid food, which he has been observing for a month. He changed his diet to semiliquid food products. At first the discomfort had abated but later it renewed despite the change in the diet. The patient developed gaseous eructation and hoarse voice. What examination should be performed to clarify the diagnosis?

- A. Esophagoscopy with biopsy
- B. Urea breath test for *H. pylori*
- C. Diurnal variations of ECG parameters
- D. Esophageal pH monitoring
- E. Abdominal US

97. After significant physical exertion a 66-year-old man with deep vein thrombosis of the extremities developed shortness of breath, intense pain in the chest on the left, marked palpitations. The patient's condition is grave, his face is cyanotic, the cervical veins are swollen, BP is 60/40 mm Hg. What investigation method would be the most advisable in this case?

- A. Selective angiopneumography
- B. Chest X-ray
- C. Echocardiography
- D. Magnetic resonance imaging of the chest
- E. Fiber-optic bronchoscopy

98. A 32-year-old woman complains of general fatigue, 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, increased 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. Nephrotuberculosis
- B. Right renal cyst
- C. Right renal carcinoma
- D. Acute glomerulonephritis
- E. Chronic pyelonephritis

99. A 36-year-old man developed a disease with acute onset 6 hours ago. The patient presents with pain in the epigastric, ileocecal, and paraumbilical areas, vomiting, weakness, nausea, and body temperature of 38,5°C. Stool is liquid, profuse, frequent, retains fecal nature, foul-smelling, frothy, colored dark green. The stomach is moderately distended and painful on palpation. The patient attributes his disease to eating raw chicken eggs one day before the clinical signs of the disease appeared. What is the most likely diagnosis?

- A. Salmonellosis
- B. Shigellosis
- C. Typhoid fever
- D. Cholera
- E. Food toxicoinfection

100. After the celebratory feast that took place the day before, a 35-year-old man was hospitalized with complaints of marked pain within the I metatarsophalangeal articulation on the right, which developed late in the night, and impaired walking. Objectively: the metatarsophalangeal articulation is swollen, hyperemic, hot to touch, painful on movement. In blood: erythrocytes - $5,1 \cdot 10^{12}/l$, Hb- 155 g/l, leukocytes- $13,0 \cdot 10^9/l$, ESR- 50 mm/hour, CRP- 46 mg/dl, uric acid - 720 mcmol/l. X-ray of feet articulations: osteoporosis, narrowing of interarticular spaces, numerous punched-out erosions. Make the preliminary diagnosis:

- A. Gout
- B. Osteoarthritis
- C. Reactive arthritis
- D. Rheumatoid arthritis
- E. Psoriatic arthritis

101. A patient has gradually lost consciousness. The skin is pale and dry. There is smell of ammonia from the mouth. Respirations are deep and noisy. Heart sounds are muffled, pericardial friction rub is present. Blood pressure is 180/130 mm Hg. Blood test: Hb- 80 g/L, leukocytes - $12 \cdot 10^9/L$, blood glucose - 6.4 mmol/L, urea - 50 mmol/L, creatinine - 1200 mcmol/L, blood osmolality - 350 mOsmol/kg H₂O. No urinary excretion. Make the diagnosis:

- A. Uremic coma
- B. Hyperglycemic coma
- C. Acute renal failure
- D. Acute disturbance of cerebral circulation
- E. Hyperosmolar coma

102. A 26-year-old woman has been undergoing treatment for community-acquired pneumonia for 10 days. It is known that her

husband had been treated for drug addiction. Sequential intravenous administration of Amoksiklav (Amoxicillin+Clavunate) + Levofloxacin combination and vancomycin in the prescribed dosage was ineffective. Within the last two days the patient's dyspnea and intoxication acutely exacerbated, bilateral pulmonary infiltrates are observed. What is the most likely cause of the medication ineffectiveness?

- A. HIV infection and pneumocystic pneumonia
- B. Tuberculosis mycobacterium infection with development of tuberculosis
- C. Idiopathic fibrosing alveolitis
- D. Infection with polyresistant bacterial strains
- E. Cancer metastases in the pulmonary tissues

103. A 64-year-old man suddenly sensed pain in his occipital area, dizziness, general weakness. He has a 15-year-long history of hypertension. Objectively the skin and mucosa are of normal color. Auscultation reveals vesicular respiration across the lung surface. At the cardiac apex the I heart sound is weakened, the II heart sound is accentuated over the aorta. Pulse is 84/min., blood pressure is 180/100 mm Hg. Other body organs and systems are unaffected. What drug should be prescribed in the first place?

- A. Captopril
- B. Ramipril
- C. Urapidil
- D. Perindopril
- E. Amlodipine

104. During winter epidemics of influenza caused predominantly by virus A/California/04/2009 (H1N1), on the 2nd day after the disease onset a 30-year-old hospitalized man presented with high fever, dry cough, myalgia, headache, and general weakness. What should be prescribed as etiotropic treatment in this case?

- A. Neuraminidase inhibitors (Oseltamivir)
- B. Antibiotics
- C. Immunoglobulin
- D. Interferon inducers
- E. Acyclovir

105. A 57-year-old patient complains of dyspnea at rest. The patient presents with orthopnea, acrocyanosis, bulging cervical veins. On percussion: dull sound over the lower lung segments; on auscultation: no respiratory murmurs. Heart rate is 92/min. Right-sided cardiac dilatation is observed. The liver is enlarged by 7 cm. Shins are swollen. Pleural effusion is suspected. What indicator would confirm the presence of transudate in this case?

- A. Total protein content in the pleural fluid below 25 g/l
- B. Presence of atypical cells
- C. Total protein content in the pleural fluid above 30 g/l
- D. Specific gravity exceeding 1015
- E. Positive Rivalta's test

106. A 38-year-old woman has been working as a milker for 15 years. She made an appointment with the doctor due to development of red rashes on her hands, predominantly in the interdigital space. The rashes are weeping, itching, and expanding on her skin. Examination of her hands shows her nail plates to be yellow and brittle. These presentations aggravate during work. Make the provisional diagnosis:

- A. Occupational eczema
- B. Scabies
- C. Pemphigus
- D. Pyoderma
- E. Dermatophytosis

107. An 18-year-old patient complains of skin rash. The patient has been suffering from this condition for 5 years. The first instance of this disease occurred after a car accident. Objectively: the patient presents with papular rash covered in silvery scales, "thimble" symptom (small pits on the nails), affected joints. What is the most likely diagnosis?

- A. Psoriasis
- B. Panaritium
- C. Onychomycosis
- D. Lupus erythematosus
- E. Rheumatism

108. A woman complains of frequent, liquid stool (up to 9-10 times per day) with mucus and blood admixtures, dull pain in the hypogastrium, weight loss of 4 kg within the last year. Objectively: malnutrition, dry skin, low turgor, aphthous stomatitis. The stomach is soft, the sigmoid colon is spastic and painful on palpation. Occult blood test is positive. Fibrocolonoscopy: edema, hyperemia, mucosal granulation, pseudopolyps, small ulcers with irregular edges. Make the diagnosis:

- A. Nonspecific ulcerative colitis
- B. Chronic enterocolitis
- C. Colon cancer
- D. Irritable bowel syndrome
- E. Crohn's disease (regional enteritis)

109. A 48-year-old woman has been hospitalized due to development of tachysystolic atrial fibrillation. She has lost 5 kg of body weight within 2 months. On palpation there is a node in the left lobe of the thyroid gland. What pathology resulted in the development of this condition?

- A. Toxic nodular goiter
- B. Atherosclerotic cardiosclerosis
- C. Chronic thyroiditis
- D. Nontoxic nodular goiter
- E. Autoimmune thyroiditis

110. A 48-year-old woman developed insomnia, depressive mood, anxiety, fears and suicidal thoughts after the death of her husband that occurred one month ago. During

her stay in the hospital she speaks in a low voice, is depressed, anxious, avoids sleeping, refuses to eat. What medications should be prescribed in this case?

- A. Antidepressants
- B. Antipsychotics
- C. Group B vitamins
- D. Nootropics
- E. Anticonvulsants

111. A 32-year-old woman complains of episodes of intense fear that occur without visible cause and last for 10-20 minutes; the episodes are characterized by rapid pulse, sweating, labored breathing, and vertigo. Specify the likely diagnosis:

- A. Panic disorder
- B. Paranoid syndrome
- C. Manic syndrome
- D. Simple schizophrenia
- E. Claustrophobia

112. A 39-year-old man suffers from chronic adrenal insufficiency and receives replacement glucocorticoid therapy (hydrocortisone - 15 mg/day). He is to undergo elective surgery for calculous cholecystitis. What medication adjustment should be made on the day of the surgery to prevent the development of acute adrenal insufficiency?

- A. Increase the dosage by 2-3 times
- B. Cancel the drug for the day of the surgery
- C. Add mineralocorticoid
- D. Add antibiotic
- E. Prescribe large volume intravenous fluid infusion

113. A resuscitation unit received a 46-year-old woman, who has been suffering from diabetes mellitus type 1 for approximately 30 years. Objectively: the skin is pale, heart sounds are weakened, BP is 170/100 mm Hg, lower limbs are markedly swollen. Blood creatinine - 1125 $\mu\text{mol/l}$, urea - 49.6 mmol/l, potassium - 6.3 mmol/l, glucose - 7.6 mmol/l, glomerular filtration rate - 5 ml/min. What treatment is indicated for the patient in the first place?

- A. Hemodialysis
- B. Kidney transplantation
- C. Hemofiltration
- D. Enterosorption
- E. Conservative detoxification therapy

114. After a long drive with the window open a man developed facial asymmetry; he cannot close his right eye, his right nasolabial fold is smoothed out, movements of expression are absent on the right, there is a disturbance of gustatory sensation in the tongue on the right. No other neurological pathologies were detected. What disease can be provisionally diagnosed in this patient?

- A. Neuropathy of the facial nerve
- B. Neuropathy of the trigeminal nerve
- C. Trigeminal ganglionitis
- D. Neuropathy of the oculomotor nerve
- E. Ischemic stroke

115. A 37-year-old man working as a typesetter in a print shop complains of rapid fatigability, paroxysmal attacks of stomachache, weak drooping hands. Examination of neurological status revealed hypotrophy of the forearm muscles. Carporadial reflexes are sharply weakened. Sensitivity is not disturbed. Gums present with dark blue border. What neurological pathology is it?

- A. Lead polyneuropathy
- B. Guillain-Barre syndrome (postinfectious polyneuritis)
- C. Shingles
- D. Ulnar neuropathy
- E. Brachial plexitis

116. A 44-year-old woman has undergone subtotal thyroid resection due to diffuse toxic goiter. On the second day after the surgery the patient's condition deteriorated; she developed palpitations, dyspnea, sweating, and diarrhea, and became fearful. The patient is anxious, her skin is moist and hot to the touch. Her temperature is 39.2°C . Heart sounds are muffled, tachycardia is observed, pulse is 160/min., blood pressure is 85/40 mm Hg. The stomach is soft and painless. What should be measured to clarify the patient's condition?

- A. Thyroid hormones
- B. Blood sugar
- C. 17-KS and 17-OCS in urine
- D. Blood epinephrine and norepinephrine
- E. Serum transaminases

117. The dermatologist has an appointment with a 30-year-old man that complains of severely itching rashes that especially disturb him at night. The rashes developed 2 weeks ago, after he had returned from a travel. Objectively on the lateral surfaces of his fingers, hands, wrists, elbows, lower abdomen, genitals, and thighs there are paired papulovesicles, single pustules, and scratch marks. What disease can be suspected?

- A. Scabies
- B. Pyoderma
- C. Dermatitis
- D. Eczema
- E. Shingles

118. A 28-year-old man, a teacher, after emotional stress developed painful muscle spasms in his right hand that occur during writing; now he has to hold the pen between the second and third fingers. He has no problems with typing or writing on the blackboard; no other motor disturbances or neurological pathologies are detected. What is the most likely diagnosis?

- A. Writer's cramp
- B. Cortical agraphia
- C. Parkinsonism
- D. Neuropathy of the right ulnar nerve
- E. Neuropathy of the right radial nerve

119. A 43-year-old man, who has been abusing alcohol and suffering from pulmonary tuberculosis, in the course of two weeks gradually developed general weakness, headache, diplopia, vomiting. Objectively: ptosis on the left, anisocoria S>D, exotropia of the left eye, neck stiffness; Kernig's and Brudzinski's signs are positive. In cerebrospinal fluid: lymphocytic pleocytosis, low glucose, precipitation of cerebrospinal fluid resulted in production of fibrin film. What is the most likely diagnosis?

- A. Tuberculous meningitis
- B. Subarachnoid hemorrhage
- C. Brainstem encephalitis
- D. Acute myelitis
- E. Basal arachnoiditis

120. A 45-year-old woman has been suffering from rheumatoid arthritis for 10 years and takes methotrexate twice a week. What statement regarding vaccination against pneumococci (23-valent vaccine) would conform to the recommendations for the management of rheumatoid arthritis issued by the European League Against Rheumatism in 2010?

- A. Vaccination is recommended
- B. Vaccination is not recommended
- C. Vaccination is contraindicated to the patients who take methotrexate
- D. Vaccination is contraindicated in cases when inflammatory process is active
- E. Vaccination necessitates increase in the dosage of the long-term medicines

121. A 65-year-old woman was diagnosed with the following: chronic rheumatic heart disease, I degree of rheumatic activity; combined mitral heart disease with prevalence of III degree stenosis; heart failure IIA with retained left ventricular ejection fraction, functional class III (NYHA). What tactics of vaccination against respiratory infections should be chosen to provide secondary prevention of exacerbations and to avoid heart failure decompensation in this patient?

- A. Scheduled yearly vaccination against influenza and pneumococci
- B. Vaccination should be combined with antibiotic administration
- C. Vaccination is contraindicated due to severe heart failure
- D. Any vaccination is contraindicated due to elderly age of the patient
- E. Any vaccination is contraindicated due to mitral valve disease

122. A 60-year-old man presents with subcompensated viral liver cirrhosis (HCV), Child-Pugh class B. What tactics should be chosen regarding the vaccination against influenza in this case?

- A. Scheduled yearly vaccination
- B. In case of influenza outbreak
- C. Combined with antiviral drugs
- D. Contraindicated due to disease progression stage, as shown by Child-Pugh class
- E. Contraindicated due to elderly age of the patient

123. A 26-year-old man complains of chills, rhinitis, dry cough, and fever up to 38°C. Examination shows him to be in a moderately severe condition; there are small pale pink non-merging spots on the skin of his back, abdomen, and extremities. Palpation reveals enlarged occipital and axillary lymph nodes. No information about vaccination history could be obtained. What is the likely etiology of this disease?

- A. Rubella virus
- B. Epstein-Barr virus
- C. Streptococcus
- D. Mumps virus
- E. Neisseria meningitidis

124. A 40-year-old man developed fever up to 37.5°C and macular rash 10 days after the first dose of MMR (Measles-Mumps-Rubella) vaccine was administered. The vaccination was considered necessary as there was a measles outbreak in the city and the patient had not received MMR vaccination in his childhood. Is revaccination with MMR vaccine possible?

- A. Possible
- B. Forbidden
- C. After a course of glucocorticoids treatment
- D. Simultaneously with antihistamines
- E. Under supervision in the infectious diseases inpatient ward

125. A 26-year-old man is undergoing a regular check-up. One year ago he had a case of tonsillar diphtheria complicated with myocarditis. Presently his condition is satisfactory, no signs of cardiovascular failure; ECG shows first-degree atrioventricular block. What vaccine was administered to this man according to his age?

- A. Adsorbed diphtheria tetanus vaccine (modified)
- B. Acellular DPT vaccine
- C. Tetanus anatoxin
- D. Oral polio vaccine (OPV)
- E. BCG vaccine

1. During medical examination a cadet in the naval college was detected to have a painless dense ulcer 1.5x0.5 in size in his perianal area at the 2 o'clock position. The ulcer floor resembles "old fat". What is the provisional diagnosis?

- A. Hard syphilitic chancre of the rectum
- B. Rectal fissure
- C. Rectal fistula
- D. Anal cancer
- E. Anal crypt suppuration

2. A 10-year-old boy, who was outdoors in windy and cold weather, developed moderate pain and tingling in his fingers and toes. When he had returned home, his parents noticed that the tips of his fingers and toes were white and their sensitivity was lost. The affected areas are warming up, the fingers are tingling and in pain. Skin pallor changed into redness, tingling stopped, slight itching and swelling of the fingers appeared. Determine the frostbite degree in this child:

- A. Frostbite of the I degree
- B. Perniosis
- C. Frostbite of the II degree
- D. Frostbite of the III degree
- E. Frostbite of the IV degree

3. 4 days after a patient received a gunshot wound to the soft tissues of middle third of the thigh, his condition suddenly began deteriorating. There are complaints of bursting pain in the wound; pain has been increasing during the last 12 hours. Edema of skin and hypodermic tissue quickly grows. Body temperature is 38,2°C, heart rate is 102/min. The wound edges gape, are dull in color; the muscles, viable as of day before, now protrude into the wound, look boiled, are dull in color, have dirty-gray coating, and fall apart when held with forceps. What infection has developed in the wound?

- A. Anaerobic
- B. Aerobic gram-negative
- C. Putrid
- D. Aerobic gram-positive
- E. Diphtheria of the wound

4. A patient received flame burns of both hands. On the dorsal and palmar surface of the hands there are blisters filled with serous fluid. The wrist joint region is hyperemic. The forearms were not injured. What is the provisional diagnosis?

- A. II degree flame burn of the hands, 4% of body surface area
- B. II degree flame burn of the hands, 2% of body surface area
- C. IIIa degree flame burn of the hands, 4% of body surface area
- D. III degree flame burn of the hands, 4% of body surface area
- E. IIb degree flame burn of the hands, 2% of body surface area

5. On the 4th day after recovery from a cold a patient was hospitalized with complaints of solitary spittings of mucoid sputum. On the 2nd day there was a single discharge of about 250 ml of purulent blood-streaked sputum. Objectively: the patient's condition is moderately severe. Respiratory rate - 28-30/min., Ps- 96/min., BP- 110/70 mm Hg. Respiration over the left lung is vesicular, over the right lung - weakened. There are various moist crackles over the lower lobe and amphoric breath sounds near the angle of scapula. What is the most likely diagnosis?

- A. Acute pulmonary abscess
- B. Exudative pleuritis
- C. Acute focal pneumonia
- D. Pleural empyema
- E. Pyopneumothorax

6. A 65-year-old woman on abdominal palpation presents with a tumor in the umbilical region and above it; the tumor is 13x8 cm in size, moderately painful, non-mobile, pulsing. On auscultation systolic murmur can be observed. What is the most likely diagnosis?

- A. Abdominal aneurysm
- B. Gastric tumor
- C. Arteriovenous aneurysm
- D. Tricuspid insufficiency
- E. Bicuspid insufficiency

7. After a case of purulent otitis a 1-year-old boy has developed pain in the upper third of the left thigh, body temperature up to 39°C. Objectively: swelling of the thigh in its upper third and smoothed out inguinal fold. The limb is in semiflexed position. Active and passive movements are impossible due to severe pain. What diagnosis is the most likely?

- A. Acute hematogenous osteomyelitis
- B. Acute coxitis
- C. Intermuscular phlegmon
- D. Osteosarcoma
- E. Brodie's abscess

8. A 74-year-old patient was delivered into admission room with clinical presentations of acute deep vein thrombosis of the shin. What symptom is the most typical of this pathology?

- A. Homans' sign
- B. Rovsing's sign
- C. Courvoisier's sign
- D. Mayo-Robson's sign
- E. Grey Turner's sign

9. A 50-year-old patient was delivered to a hospital with complaints of blood traces in urine. Urination is painless and undisturbed. Macrohematuria had been observed for 3 days. Objectively: kidneys cannot be palpated, suprapubic area is without alterations, external genitalia are non-pathologic. On rectal investigation: prostate is not enlarged, painless, has normal structure. Cystoscopy revealed no alterations. What is the most likely

diagnosis?

- A. Renal carcinoma
- B. Bladder tuberculosis
- C. Varicocele
- D. Dystopic kidney
- E. Necrotic pyelitis

10. A man complains of constant dull pain in the perineum and suprapubic area, weak flow of urine, frequent difficult painful urination, nocturia. The patient has been suffering from this condition for several months, during which urination was becoming increasingly difficult, and pain in the perineum has developed. On rectal examination: the prostate is enlarged (mainly its right lobe), dense, asymmetrical, central fissure is smoothed out, the right lobe is of stony density, painless, tuberos. What disease is it?

- A. Prostate cancer
- B. Prostate sclerosis
- C. Urolithiasis, prostaticolith of the right lobe
- D. Prostate tuberculosis
- E. Chronic congestion prostatitis

11. A 17-year-old young man complains of general weakness, trismus, twitching of the muscles in his left shin. 7 days ago he pierced his foot with a nail. Objectively: at the sole of the foot there is a wound, 0,3x0,2 mm in size, with small amount of serous-purulent discharge, the skin around the wound is hyperemic. What is the most likely diagnosis?

- A. Tetanus
- B. Phlegmon
- C. Osteomyelitis
- D. Infected wound
- E. Erysipelas

12. A patient with trauma of the lower third of the forearm volar surface caused by a glass shard came to a first-aid center. Objectively: flexion of the IV and V fingers is impaired, sensitivity of the inner dorsal and palmar surfaces of the hand and IV finger is decreased. What nerve is damaged?

- A. Ulnar
- B. Radial
- C. Median
- D. Musculocutaneous
- E. Axillary

13. A man diagnosed with closed-angle glaucoma, grade IIa, of the right eye is registered for regular medical check-ups. In the evening an acute glaucoma attack occurred in his right eye; an ambulance was called. What emergency aid would be optimal in this case?

- A. Pilocarpine, Diacarb (Acetazolamide), lytic mixture
- B. Atropine eye drops
- C. Antibiotic eye drops, broad-spectrum
- D. Sulfacetamide sodium eye drops
- E. Dexamethasone eye drops

14. A 58-year-old patient complains of pain in the lower left extremity, which aggravates during walking, and sensation of cold and numbness in the both feet. The patient has been suffering from this condition for 6 years. Objectively: the skin is pale and dry, with hyperkeratosis. On the left shin hair is scarce. Pulse cannot be detected over the pedal and popliteal arteries and is weakened over the femoral artery. On the right limb pulsation of the popliteal artery is retained. What is the most likely diagnosis?

- A. Atherosclerosis obliterans of the lower extremities
- B. Obliterating endarteritis
- C. Femoral artery thrombosis
- D. Raynaud's disease
- E. Buerger's disease (thromboangiitis obliterans)

15. A 47-year-old woman came to the admission room with complaints of general weakness, dizziness, vomiting with blood clots. Condition onset was 3 hours ago. The patient has no preceding illnesses. Blood pressure is 90/60 mm Hg, pulse is 106/min., of poor volume. The abdomen is soft, with mild tenderness in the epigastrium. Blood test: erythrocytes - $2.1 \cdot 10^{12}/L$, Hb- 70 g/L, hematocrit - 28%. What tactics should the doctor on duty choose?

- A. Consult the surgeon
- B. Refer the patient to the family doctor
- C. Give spasmolytics
- D. Perform gastric lavage
- E. Make an appointment for colonoscopy

16. A 52-year-old patient complains of pain in the right part of her chest, dyspnea, cough with large amounts of foamy sputum emitting foul smell and resembling "meat slops". Objectively: the patient's condition is grave, cyanosis is observed, breathing rate is 31/min., percussion sound above the right lung is shortened, auscultation revealed various moist rales (crackles). What is the most likely diagnosis?

- A. Lung gangrene
- B. Lung abscess
- C. Empyema of pleura
- D. Multiple bronchiectasis
- E. Chronic pneumonia

17. A man complains of sore throat on the left, pain in his left ear, t^o up to 39^oC , and nasal sound of his voice. Disease onset was 5 days ago. Marked trismus and increased salivation are observed. The head tilts to the left shoulder. Left side of the soft palate presents with swelling, hyperemia, and infiltration. Retromandibular lymph nodes on the left are acutely painful on palpation. Otoscopy results are normal. Make the diagnosis:

- A.** Left-sided peritonsillar abscess
- B.** Retropharyngeal abscess
- C.** Parapharyngeal phlegmon
- D.** Peritonsillitis on the left
- E.** Cervical phlegmon on the left

18. A patient has the second and third degree burns of the 15% of the body surface. On the 20th day after the trauma the patient presents with sharp increase of body temperature, general weakness, rapid vesicular respiration; facial features are sharpened, BP is 90/50 mm Hg, heart rate is 112/min. What complication is it?

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

19. A patient in the state of clinical death is being resuscitated through mouth-to-mouth artificial pulmonary ventilation and external cardiac massage. A doctor noticed that air does not flow into the patient's airways and his head and torso are positioned at the same level. Why is artificial respiration ineffective in the given case?

- A.** Tongue retraction
- B.** Low breathing volume
- C.** External cardiac massage
- D.** Probe is absent from the stomach
- E.** The patient's mouth is too small

20. A patient complains of suppuration from the ear and impaired hearing of the left ear, which have been observed for the past 6 years. The patient had periodical headaches, general indisposition, fever. Objectively: otoscopy of the external auditory meatus revealed mucopurulent odorless substance. The eardrum is of normal color, with central perforation. What is the most likely diagnosis?

- A.** Chronic mesotympanitis
- B.** Otosclerosis
- C.** Acute otitis media
- D.** Chronic epitympanitis
- E.** Chronic sensorineural hearing loss

21. In 2 hours after a traffic accident a 28-year-old man in grave condition was delivered to a hospital. The patient complains of abdominal pain. He received a blow to the abdomen with the steering wheel. Objective examination revealed the following: the abdomen does not participate in respiration, is tense and acutely painful on palpation; abdominal guarding is present, peritoneal irritation signs are positive, hepatic dullness is absent. BP is 90/60 mm Hg, heart rate is 120/min. What further treatment tactics should be chosen?

- A.** Laparotomy
- B.** Laparoscopy
- C.** Cold to the abdomen
- D.** Abdominal X-ray
- E.** Laparocentesis

22. A 48-year-old woman was arrived to the surgical unit with wounds in her thigh. On examination the wound surface has dirty-gray coating with unpleasant sweet smell. Wound content resembles raspberry jelly. Skin tissues around the wound are glossy and turgid. Palpation reveals moderate crepitation in the tissues. What microflora is the most likely to cause such inflammation?

- A.** Anaerobic clostridial
- B.** Anaerobic non-clostridial
- C.** Streptococci
- D.** Staphylococci
- E.** Blue pus bacillus

23. A 30-year-old patient was hospitalized in an intensive care unit with a diagnosis of multiple bee stings. Skin is pale and covered with cold sweat. Pulse can be palpated only at the carotid arteries and is 110/min.; breathing rate is 24/min., rhythmical, weakened. What drug must be administered immediately?

- A.** Epinephrine hydrochloride
- B.** Prednisolone
- C.** Norepinephrine hydrochloride
- D.** Dopamine
- E.** Tavegil (Clemastine)

24. A 46-year-old woman has been hospitalized with open fracture of the left thigh in its middle third. She underwent the surgery - fixation with extraosseous osteosynthesis plates. On the 4th day after the surgery she developed pain in the wound, body temperature rose over 39°C. What measures should be taken in this case?

- A.** Undo the sutures, drain the wound, and prescribe antibiotics
- B.** Prescribe broad spectrum antibiotics and hormonal agents
- C.** Administer antibiotics intraosseously and hypothermia locally
- D.** Inject antibiotics into the area surrounding the wound, prescribe spasmolytics and analgesics
- E.** Remove the fixation, prescribe sulfanilamides

25. A 42-year-old man was delivered to a surgical in-patient department with complaints of icteric skin, pain in the right subcostal area. Biochemical blood analysis: total bilirubin - 140 μmol/l, direct bilirubin - 112 μmol/l. On US: choledoch duct - 1,4 cm, a concrement is detected in the distal area. Gallbladder is 40 cm, no concretions. What treatment tactics should be chosen?

- A.** Endoscopic papillosphincterotomy
- B.** Laparoscopic cholecystectomy
- C.** Laparotomy with choledoch duct drain
- D.** Laparotomy with cholecystectomy
- E.** Treatment in an infectious diseases hospital

26. 4 weeks after myocardial infarction a 56-year-old patient developed acute heart pain, marked dyspnea. Objectively: the patient's condition is extremely grave, there is marked cyanosis of face, swelling and throbbing of neck veins, peripheral pulse is absent, the carotid artery pulse is rhythmic, 130/min., BP is 60/20 mm Hg. Auscultation of the heart reveals extremely muffled sounds, percussion reveals heart border extension in both directions. What is the optimal treatment tactics for this patient?

- A.** Pericardiocentesis and immediate thoracotomy
- B.** Oxygen inhalation
- C.** Puncture of the pleural cavity on the left
- D.** Conservative treatment, infusion of adrenomimetics
- E.** Pleural cavity drainage

27. A 43-year-old woman complains of persistent stomachache 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 metallic overtone, splashing, and dripping. Make the diagnosis:

- A.** Acute intestinal obstruction
- B.** Acute necrotizing pancreatitis
- C.** Acute destructive cholecystitis
- D.** Acute erosive gastritis
- E.** Acute nonspecific colitis

28. An infant cries during urination, the foreskin swells and urine is excreted in drops. What approach to treatment should be chosen?

- A.** Create an opening into the foreskin cavity
- B.** Prescription of α -adrenergic blocking agents
- C.** Prescription of antispasmodic agents
- D.** Urinary bladder catheterization
- E.** Epicycstostomy

29. A 20-year-old patient complains of pain in the left lumbar region, arterial pressure rise up to 160/110 mm Hg. US revealed that the structure and size of the right kidney were within age norms, there were signs of the 3rd degree hydronephrotic transformation of the left kidney. Doppler examination revealed an additional artery running to the lower pole of the kidney. Excretory urogram shows a narrowing in the region of ureteropelvic junction. Specify the treatment tactics:

- A.** Surgical intervention
- B.** Administration of spasmolytics
- C.** Administration of ACE inhibitors
- D.** Kidney catheterization
- E.** Administration of β -blockers

30. A 49-year-old patient consulted a doctor about difficult swallowing, voice hoarseness, weight loss. These symptoms have been gradually progressing for the last 3 months. Objectively: the patient is exhausted, there are enlarged supraclavicular lymph nodes. Esophagoscopy revealed no esophageal pathology. Which of the following investigations is the most appropriate in this case?

- A.** Computed tomography of chest and mediastinum
- B.** X-ray of lungs
- C.** Multiplanar imaging of esophagus
- D.** Radioisotope investigation of chest
- E.** Ultrasound investigation of mediastinum

31. A 38-year-old patient has been delivered by an ambulance to a surgical department with complaints of general weakness, indisposition, black stool. On examination the patient is pale, there are dotted hemorrhages on the skin of his torso and extremities. On digital investigation there are black feces on the glove. Blood test: Hb- 108 g/L, thrombocytopenia. Anamnesis states that similar condition was observed 1 year ago. Make the diagnosis:

- A.** Thrombocytopenic purpura
- B.** Hemophilia
- C.** Bleeding from an ulcer
- D.** Rectal tumor
- E.** Nonspecific ulcerative colitis

32. A 3-year-old child presents with sharp deterioration of his general condition. He has a history of purulent otitis. His temperature is now 38.5°C . The left leg is pressed to the torso, active movements are absent, the lower third of the thigh and knee joint are thickened, hyperemic, with localized fever. Axial load leads to acute discomfort of the patient. What is the most likely diagnosis?

- A.** Epiphyseal osteomyelitis on the left
- B.** Left hip fracture
- C.** Rheumatoid arthritis
- D.** Osteogenic sarcoma
- E.** Hygroma of the knee

33. A patient after a blow to the head developed general symptoms of cerebral disturbance, nausea, vomiting, focal signs - hemi-hyperreflexia $S>D$, hemihyperesthesia on the left, marked meningeal syndrome. Neither cranial X-ray nor computer tomography revealed any pathologies. What examination method would allow making and clarification of the diagnosis?

- A. Lumbar puncture
- B. Echoencephalography
- C. Electroencephalography
- D. Angiography
- E. Pneumoencephalography

34. A burn victim with flame burns of the IIIA-B and IV degrees on his face, neck, and anterior surface of the thorax was brought into the admission room. The hairs in his nostrils are burnt, his labial and glossal mucosa are gray-white. The voice is hoarse; respirations are frequent and shallow; the patient has trumpet-like cough that produces soot-streaked sputum. The signs of respiratory failure were progressing, while the patient was being transported into the intensive care unit. What emergency care must be provided to this patient?

- A. Intubation of the trachea and mechanical ventilation
- B. Tracheostomy
- C. Administration of bronchial spasmolytics
- D. Administration of respiratory analeptics
- E. Inhalation of moisturized oxygen

35. The body of a 24-year-old woman with probable signs of poisoning has been found on the street. Forensic medical examination was requested by an investigator during examination of the site and the body. According to the Criminal Procedure Code currently in force in Ukraine, forensic medical examination is required when it is necessary to determine the:

- A. Cause of death
- B. Manner of death
- C. Time of death
- D. Mode of death
- E. Mechanism of death

36. A 27-year-old man was hospitalized in severe condition 50 minutes after receiving a penetrating wound to the left side of the chest. Objectively the patient is in a stupor, his skin is pale and acrocyanotic. Pulse is 120/min., of poor volume, weak. Blood pressure is 80/40 mm Hg. Heart sounds are muffled, cardiac borders are markedly expanded. In the III intercostal area along the parasternal line on the left there is a stab-incised wound. Plain chest X-ray shows enlarged heart shadow with smoothed out waist of the heart, there is hemothorax on the left to the 5th rib. What contributes the most to the severity of the patient's condition?

- A. Cardiac tamponade
- B. Acute heart failure
- C. Cardiac rhythm disturbance
- D. Blood loss
- E. Hemothorax and acute respiratory failure

37. During regular examination of a 2-year-old boy, he presents with enlarged left kidney, painless on palpation. The right kidney was undetectable on palpation. Excretory urography shows no contrast on the right.

Cytoscopy detected hemiatrophy of the urinary bladder trigone, the right ureteral orifice is not detected. What pathology is it?

- A. Agenesis of the right kidney
- B. Dystopia of the right kidney
- C. Hypoplasia of the right kidney
- D. Agenesis of the right ureter
- E. Ectopic right ureteral orifice

38. A 64-year-old patient has been hospitalized with complaints of progressive jaundice that developed over 3 weeks without pain syndrome and is accompanied by general weakness and loss of appetite. Objectively: temperature is 36,8°C, heart rate is 78/min, abdomen is soft and painless, peritoneum irritation symptoms are not detected, palpation reveals sharply enlarged tense gallbladder. What disease can be characterised by these symptoms?

- A. Cancer of pancreas head
- B. Duodenal ulcer
- C. Acute cholecystitis
- D. Chronic cholecystitis
- E. Cholecystitis caused by lamblia

39. A 37-year-old patient complains of pain in the spinal column, reduced mobility. The condition persists for 7 years. "Sway back" is observed, there is no movement in all spinal regions. On X-ray: "bamboo spine" is detected. What is the most likely diagnosis?

- A. Ankylosing spondylitis
- B. Osteochondrosis
- C. Spondylitis deformans
- D. Tuberculous spondylitis
- E. Spondylolisthesis

40. A 54-year-old patient complains of weakness, jaundice, itching skin. Disease onset was 1.5 months ago: fever up to 39°C appeared at first, with progressive jaundice developed 2 weeks later. On hospitalisation jaundice was severely progressed. Liver cannot be palpated. Gallbladder is enlarged and painless. Blood bilirubin is 190 μmol/L (accounting mainly for direct bilirubin). Stool is acholic. What is the most likely reason for jaundice in this patient?

- A. Mechanical jaundice
- B. Hepatocellular jaundice
- C. Hemolytic jaundice
- D. Caroli syndrome
- E. Gilbert's syndrome

41. A 23-year-old man came to the surgeon with complaints of pain, redness of the skin, and swelling in the area of his proximal interphalangeal joint of the III finger on the right hand. Six days ago he pricked his finger with a wire. Objectively the III finger on the right hand is swollen, hyperemic, prominent in the projection of interphalangeal joint, sharply painful on touch and during movements. Finger mobility is reduced. Fluctuation sign

is present. What diagnosis corresponds to the given clinical presentation?

- A. Articular panaritium
- B. Bone panaritium
- C. Subcutaneous panaritium
- D. Pandactylitis
- E. Finger furuncle

42. A 30-year-old patient was in a car accident. He is unconscious, pale, has thready pulse. In the middle third of the right thigh there is an extensive laceration with ongoing profuse external arterial bleeding. What urgent actions must be taken to save the life of the patient?

- A. Tourniquet above the wound of the right thigh
- B. Tourniquet below the wound of the right thigh
- C. Artificial lung ventilation
- D. Precordial thump
- E. Application of plaster bar

43. A 25-year-old patient has been admitted to the hospital with the following problems: weakness, sweating, itching, weight loss, enlarged submandibular, cervical, axillary, inguinal lymph nodes. Objectively: hepatomegaly. Lymph node biopsy revealed giant Berezovsky-Reed-Sternberg cells, polymorphocellular granuloma composed of lymphocytes, reticular cells, neutrophils, eosinophils, fibrous tissue, and plasma cells. What is the most likely diagnosis?

- A. Lymphogranulomatosis (Hodgkin's lymphoma)
- B. Lymph node tuberculosis
- C. Lymphoreticulosarcoma
- D. Cancer metastases to the lymph nodes
- E. Macofollicular reticulosis

44. A 68-year-old man complains of inability to urinate for a day. On attempt of urinary bladder catheterization there was detected a rough stricture in the membranous portion of the urethra. What first aid tactics should be applied in this case?

- A. Troacar cystostomy
- B. Adenomectomy
- C. Optical internal urethrotomy
- D. α -adrenoblockers
- E. Urinary bladder catheterization

45. Heart X-ray of a 31-year-old man has revealed the following: with tightly filled opacified esophagus there is a marginal filling defect in its middle third on the posterior wall; the defect is 1,8x1,3 cm in size with clear oval border. Mucosal folds are retained and envelop the defect; wall peristalsis and elasticity are not affected. There are no complaints regarding the condition of the patient's alimentary canal. Make the provisional diagnosis:

- A. Esophageal tumor
- B. Achalasia cardiae
- C. Esophageal burns
- D. Diverticulum
- E. Barrett esophagus

46. A 45-year-old woman underwent one year ago mastectomy followed by chemo- and radiation therapy. She now complains of dyspnea at rest and temperature up to 37.2°C. Her general condition is severe, acrocyanosis is observed. The right side of her chest practically does not participate in respiration. Percussion reveals a dull sound below the 3rd rib; auscultation detects acute weakening of the respiratory sounds. Pleural puncture on the right has yielded a large amount of hemorrhagic exudate. What complication has developed in the patient?

- A. Carcinomatous pleuritis
- B. Acute pleural empyema
- C. Acute right-sided pleuropneumonia
- D. Right lung abscess
- E. Pulmonary embolism

47. A patient with signs of general overexposure to cold presenting with local frostbites of fingers has been delivered into an admission room. Objectively: conscious, inert, speech is slow, the skin of the face is cold, body temperature is 34°C, heart rate is 68/min. What would be the actions of a doctor on call?

- A. Hospitalize the patient to the surgical department
- B. Hospitalize the patient to the therapeutics department
- C. Hospitalize the patient to the traumatology department
- D. Let the patient go home
- E. Refer to a family doctor on the next day

48. A 24-year-old patient had been delivered to a thoracic department with a chest injury, fracture of the IV, V, VI ribs on the right. Plan radiography showed the fluid level in the pleural cavity to be reaching the III rib on the right. Puncture contained blood clots. What is the optimal treatment tactics?

- A. Emergency thoracotomy
- B. Pleural puncture
- C. Thoracentesis and thoracostomy
- D. Hemostatic therapy
- E. Medical thoracoscopy

49. A 74-year-old patient visited a urologist with complaints of pain above the pubis and inability to urinate for 8 hours. At home he had taken antispasmodics and had a warm bath but no improvement occurred. Objectively: abdomen is soft and painful above the pubis; dullness of percussion sound is observed above the pubis. Murphy's (Pasternatski's) punch sign is negative on the both sides. What condition does the patient have?

- A.** Acute urinary retention
- B.** Paradoxal ischuria
- C.** Chronic urinary retention
- D.** Anuria
- E.** Oliguria

50. During preventive examination a 58-year-old man on chest X-ray presents with multiple globular pale shadows 3 cm in diameter within parenchyma of the both lungs. Examination in the oncologic hospital: the primary focus is not found; transbronchial biopsy with cytologic investigation detected cells of glandular neoplasm. What tactics should the physician choose?

- A.** Polychemotherapy courses
- B.** Exploratory laparotomy
- C.** Exploratory thoracotomy
- D.** Laparoscopy
- E.** Symptomatic treatment at home

51. A 35-year-old man complains of persisting enlargement of his peripheral lymph nodes that cause him no discomfort. The case history states that the first lymph nodes to enlarge were cervical, supraclavicular, and axillary; new groups of lymph nodes emerged. Objectively the lymph nodes are soft and elastic on palpation, enlarged, painless, not fixed to the surrounding tissue. What examination method would be the most informative for early diagnostics of this disease?

- A.** Needle biopsy
- B.** Magnetic resonance tomography
- C.** Radioisotope scanning of the skeleton
- D.** Ultrasound
- E.** X-ray

52. A woman in her early- to mid-thirties has lost her consciousness 3-5 minutes ago. On examination: the skin is pale, no pulse over the carotid arteries, no spontaneous respiration, pupils are dilated; the patient is nonresponsive, presents with atony. The patient's condition can be determined as:

- A.** Apparent death
- B.** Natural death
- C.** Syncope
- D.** Brain death
- E.** Coma

53. A 38-year-old man underwent surgical treatment of a wound with a suppuration focus. On the 8th day after the procedure the wound cleared of purulo-necrotic discharge and granulations appeared. However, against the background of antibacterial therapy, the patient's body temperature persists as high as 38.5-39.5°C; chills, excessive sweating, and euphoria are observed in the patient; heart rate is 120/min. What complication of the local suppurative inflammatory process can be suspected?

- A.** Sepsis
- B.** Purulent-resorptive fever
- C.** Trombophlebitis
- D.** Meningitis
- E.** Pneumonia

54. A 28-year-old woman complains of girdle pain in her epigastric and left subcostal areas with irradiation to the back, nausea, and vomiting without relief. On examination a surgeon observes stomach distension and meteorism. There are positive Mondor's, Mayo-Robson's, and Cullen's symptoms. What is the most likely diagnosis?

- A.** Acute pancreatitis
- B.** Acute cholecystitis
- C.** Acute intestinal obstruction
- D.** Aortic dissecting aneurysm
- E.** Splenic infarction

55. A man complains of high fever, pain in the area of his right mastoid bone, and purulent discharge from the right ear. One week ago he had a case of URTI. Objectively the right auricle protrudes, the skin behind the ear is hyperemic and pastose; on palpation of the mastoid bone the pain intensifies; the auditory meatus is filled with thick pus, posterosuperior meatal wall sags; the tympanic membrane is red and perforated. Make the diagnosis:

- A.** Acute mastoiditis
- B.** Furuncle of the external auditory meatus
- C.** Acute otitis media
- D.** Acute otitis externa diffusa
- E.** Exacerbation of chronic mesotympanitis

56. A 28-year-old man after car accident received a wound to the right side of his chest inflicted by a sharp metal object. A foamy liquid flows out from the wound, there are tympanitis and acutely weakened respirations in the right. Blood pressure is 70/30 mm Hg, pulse is 120/min., Hb is 28 g/L. X-ray shows collapsed right lung, horizontal fluid level is at the 3rd rib. What treatment tactics should be chosen?

- A.** Urgent thoracotomy
- B.** Delayed thoracotomy
- C.** Drain the right pleural cavity
- D.** Apply occlusive dressing to the wound
- E.** Conservative therapy

57. When her car collided with a tree, a 37-year-old woman felt sharp pain in her left hip joint. She was unable to get out of the car. Her position is forced, the hip is pressed to the abdomen, fixed, and rotated inwards; the limb is flexed in the knee, any attempt to change the position results in sharp pain. Make the diagnosis:

- A.** Closed dislocation of the left hip
- B.** Contusion of the left hip joint
- C.** Hemarthrosis of the left hip joint
- D.** Arthritis of the left hip joint
- E.** Closed cervical fracture of the left hip

58. A 22-year-old man at 18:00 developed persisting dull pain in the epigastrium. Three hours later nausea appeared, he vomited once. By the morning the pain shifted to the right iliac area. Body temperature rose to 38.6°C , developed tachycardia of 110/min. On examination there are muscle rigidity and Bloomberg's sign (rebound tenderness) in the right iliac area of the anterior abdominal wall. Plain x-ray of the abdomen shows no fluid levels, free air under the diaphragm on the right. Make the diagnosis:

- A.** Perforation of a gastric ulcer
- B.** Renal colic
- C.** Acute appendicitis
- D.** Acute pancreatitis
- E.** Acute cholecystitis

59. 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.** Fine-needle aspiration biopsy
- B.** Thyroid scintigraphy
- C.** Case monitoring
- D.** Determine TSH level in the blood
- E.** Positron emission tomography (PET)

60. A 19-year-old young man complains of cough with expectoration of purulent sputum in amount of 100 ml per day, hemoptysis, dyspnea, increased body temperature up to 37.8°C , general weakness, weight loss. The patient's condition has been persisting for 4 years. Exacerbations occur 2-3 times per year. The patient presents with malnutrition, pale skin, cyanosis of the lips, drumstick (clubbed) fingers. Tympanic percussion sound in the lungs, weakened respiration, various numerous moist crackles in the lower pulmonary segments on the left can be observed. In blood: erythrocytes - $3.2 \cdot 10^{12}/\text{L}$, leukocytes - $8.4 \cdot 10^9/\text{L}$, ESR- 56 mm/hour. On X-ray: lung fields are emphysematous, the left pulmonary root is deformed and dilated. What is the most likely diagnosis?

- A.** Multiple bronchiectasis of the left lung
- B.** Chronic left-sided pneumonia
- C.** Chronic abscess of the left lung
- D.** Left-sided pulmonary cystic dysplasia
- E.** Suppuration of the cyst in the left lung

61. An 8-year-old child presents with blood pressure up to 180/100 mm Hg in the upper limbs accompanied by headaches, tinnitus, occasional nosebleeds, and high fatigability. On examination there is no pulse over the leg arteries. ECG shows left ventricular hypertrophy. MRI-scan shows aortic narrowing to 5 mm in the typical place. Coarctation of aorta is diagnosed. What kind

of treatment should be prescribed in this case?

- A.** Surgical
- B.** Conservative
- C.** Physical therapy
- D.** Case monitoring
- E.** Abstain from surgery in favor of complex conservative therapy

62. A 6-year-old girl arrived to the in-patient unit with complaints of enlargement of the lower third of her right thigh. According to the case history, she has been stepping carefully on her right leg and limping for 6 months. Blood test detected anemia. X-ray of the right thigh shows a round bone defect with clear margins resembling melting sugar in the distal metaphysis. What provisional diagnosis can be made in this case?

- A.** Osteogenic sarcoma of the right femur
- B.** Rheumatoid arthritis of the right knee joint
- C.** Acute hematogenous osteomyelitis of the distal femoral metaphysis on the right
- D.** Tuberculous osteitis of the distal femoral metaphysis on the right
- E.** Giant cell tumor of the right femur

63. A 46-year-old man came to the surgeon's office. He complains of twitching sensation in the wound on his left foot, insomnia, and anxiety. According to the patient, he received this wound 5 days ago, when he accidentally stepped on a glass shard, while on the beach. He requested no medical assistance. Objectively the patient's general condition is satisfactory, pulse is 75/min., blood pressure is 130/80 mm Hg, temperature is 36.9°C . On the plantar surface of his foot there is a wound 1.5 cm long and up to 3 cm deep. The wound edges are moderately hyperemic, no discharge from the wound is observed. What disease can be suspected in this patient?

- A.** Tetanus
- B.** Diphtheria
- C.** Anthrax
- D.** Fasciitis
- E.** Phlegmon

64. A 20-year-old student was brought to the first-aid center. He has a closed fracture of the left forearm and a contused lacerated wound on his left shin. After the patient received initial wound management, he presented the documents confirming that he has received all the necessary preventive vaccination as scheduled. What should the doctor do to prevent tetanus in this patient?

- A.** Dynamic case monitoring
- B.** Administration of tetanus immunoglobulin
- C.** Administration of anti-tetanus serum
- D.** Antibiotic therapy
- E.** Administration of tetanus toxoid

1. An 8-year-old boy developed a temperature of $37,5^{\circ}\text{C}$ two days after his recovery from the case of URTI. He complains of suffocation, heart pain. Objectively: the skin is pale, tachycardia, the I heart sound is weakened, short systolic murmur in the 4th intercostal area near the left edge of the breastbone. What heart disorder such clinical presentation is characteristic of?

- A. Nonrheumatic myocarditis
- B. Primary rheumatic carditis
- C. Myocardiodystrophy
- D. Fallot's tetrad
- E. Cardiomyopathy

2. A 7-year-old boy has severe pulmonary mucoviscidosis (cystic fibrosis). He complains of dyspnea and blood expectoration. Objectively he presents with lagging physical development, acrocyanosis, hepatomegaly, drumstick fingers, and nail plates resembling a "clock face". Provisional diagnosis of chronic pulmonary heart disease is made. What examination would be the most informative for diagnosis confirmation?

- A. Doppler echocardiography
- B. Electrocardiography
- C. Chest X-ray
- D. Rheography of the pulmonary artery
- E. Ultrasound of the liver

3. A 12-year-old boy with hypertrophic cardiomyopathy complains of dyspnea caused by the slightest physical exertion. Echocardiography detected asymmetrical left ventricular hypertrophy, signs of pulmonary hypertension, and left ventricular dilatation, its ejection fraction is 59%. These developments are indicative of:

- A. Heart failure with preserved ejection fraction
- B. Heart failure with reduced ejection fraction
- C. Primary pulmonary hypertension
- D. Essential hypertension
- E. Symptomatic arterial hypertension

4. A 9-year-old boy has been suffering from multiple bronchiectasis since he was 3 years old. Exacerbations occur frequently (3-4 times a year), after conservative therapy there are short remission periods. The disease progresses, the child is physically underdeveloped, presents with pale skin, acrocyanosis, deformed nail plates in the shape of "clock-face". Bronchography reveals sacular bronchiectases in the lower lobe of the right lung. What further treatment tactics should be chosen?

- A. Surgical intervention
- B. Continuation of conservative therapy
- C. Physiotherapy
- D. Sanatorium-and-spa treatment
- E. Physical training

5. An infant has been born at the 41st week of gestation. The pregnancy was complicated with severe gestosis of the second semester. The weight of the baby is 2400 g, the height is 50 cm. Objectively: the skin is flabby, the layer of subcutaneous fat is thin, hypomyotonia, neonatal reflexes are weak. The internal organs are without pathologic changes. This newborn can be assessed as a:

- A. Full-term infant with intrauterine growth retardation
- B. Premature infant
- C. Immature infant
- D. Postmature infant
- E. Full-term infant with normal body weight

6. During examination a 4-month-old child with meningococemia presents with acrocyanosis, cold extremities, tachypnea, and thready pulse, blood pressure of 30/0 mm Hg, anuria, and sopor. What clinical syndrome is it?

- A. Septic shock
- B. Neurotoxicosis
- C. Exicosis
- D. Encephalic syndrome
- E. Acute renal failure

7. The right arm of a newborn is stretched along the torso with all its joints extended; the shoulder is rotated inwards, while the forearm is pronated, the hand is in the position of palmar flexion. Spontaneous movements are absent in the shoulder and elbow joints, passive movements are painless. What is the most likely diagnosis?

- A. Duchenne-Erb palsy, superior proximal type
- B. Dejerine-Klumpke palsy, inferior distal type
- C. Total obstetric palsy
- D. Osteomyelitis of the right humerus
- E. Poliomyelitis

8. A 1-year-old child with a case of URTI suddenly developed noisy respirations with difficult inspiration, intercostal retractions, and barking cough on the 2nd night after the disease onset. What is the most likely diagnosis?

- A. Stenosing laryngotracheobronchitis
- B. Acute pulmonary inflammation
- C. Bronchial asthma
- D. Acute bronchitis
- E. Acute bronchiolitis

9. A 10-year-old boy with symptoms of arthritis and myocarditis was delivered into a hospital. Based on clinical examination the preliminary diagnosis of juvenile rheumatoid

arthritis was made. What symptom is the most contributive for the diagnostics of this disease?

- A.** Reduced mobility of the joints in the morning
- B.** Regional hyperemia of the joints
- C.** Affection of the large joints
- D.** Enlarged heart
- E.** Increased heart rate

10. A 9-month-old child presents with fever, cough, dyspnea. The symptoms appeared 5 days ago after a contact with a person with URTI. Objectively: the child is in grave condition. Temperature is 38°C , cyanosis of nasolabial triangle is present. RR- 54/min, nasal flaring during breathing is observed. There was percussion dullness on the right below the scapula angle and tympanic sound over the other areas of lungs. Auscultation revealed bilateral fine moist crackles predominating on the right. What is the most likely diagnosis?

- A.** Pneumonia
- B.** URTI
- C.** Acute laryngotracheitis
- D.** Acute bronchitis
- E.** Acute bronchiolitis

11. A 7-year-old boy has been an inpatient for 1.5 months. He had been delivered to the hospital with complaints of edemas all over his body, low urine output, and headache. Clinical urinalysis: proteins - 7.1 g/L, leukocytes - 1-2 in the vision field, erythrocytes - 3-4 in the vision field. During the course of treatment the edemas gradually dissipated, headache abated, diuresis normalized. Daily urine proteins - 3 g/L. Biochemical blood test: total protein - 43.2 g/L, urea - 5.2 mmol/L, cholesterol - 9.2 mmol/L. What glomerulonephritis syndrome is the most likely to be present in the patient?

- A.** Nephrotic
- B.** Nephritic
- C.** Isolated urinary
- D.** Hematuric
- E.** Mixed

12. The mother of a 3-month-old child came to a family doctor with complaints of her child being physically underdeveloped and suffering from cough attacks and dyspnea. Anamnesis: the child is the result of the second full-term pregnancy with the risk of miscarriage (the first child died of pulmonary pathology at the age of 4 months, according to the mother). Body mass at birth is 2500 g. Cough attacks were observed from the first days of life, twice the child was treated for bronchitis. Considering the severity of the child's condition the doctor made the referral for hospitalization. What diagnosis was most likely stated in the referral?

- A.** Mucoviscidosis (Cystic fibrosis)
- B.** Acute obstructive bronchitis
- C.** Recurrent obstructive bronchitis
- D.** Pertussis
- E.** Acute obstructive pneumonia

13. A 10-year-old girl complains of stomachache that appears and intensifies after she eats rough or spicy food, sour eructation, heartburn, frequent constipations, headaches, irritability. She has been presenting with these signs for 12 months. Her meals are irregular and consist of dry food. Objectively her diet is sufficient in calories. The tongue is moist with white coating near the root. The abdomen is soft and painful in the epigastrium. What method would be optimal for diagnosis-making in this case?

- A.** Esophagogastroduodenoscopy
- B.** Intragastric pH-metry
- C.** Fractional gastric analysis (Fractional test meals)
- D.** Phase-contrast X-ray imaging
- E.** Biochemical blood test

14. A boy was born at 32 weeks of gestation. 2 hours after the birth he developed respiratory distress (RD). The RD severity assessed by Silverman score was 5. The respiratory disorders progressed, respiratory failure could not be eliminated by Martin-Bouyer CPAP (continuous positive airway pressure). X-ray of lungs shows reticular and nodular pattern, air bronchogram. What is the most likely cause of respiratory distress syndrome?

- A.** Hyaline membrane disease
- B.** Segmental atelectasis
- C.** Bronchopulmonary dysplasia
- D.** Congenital pulmonary emphysema
- E.** Edematous hemorrhagic syndrome

15. An 8-year-old child with a 3-year-long history of diabetes was hospitalized in hyperglycemic coma. Specify the initial dose of insulin to be administered:

- A.** 0,1-0,2 U/kg of body weight per hour
- B.** 0,05 U/kg of body weight per hour
- C.** 0,2-0,3 U/kg of body weight per hour
- D.** 0,3-0,4 U/kg of body weight per hour
- E.** 0,4-0,5 U/kg of body weight per hour

16. A 5-year-old child that contacts with viral hepatitis in the kindergarten presents with increased body temperature up to 38°C , weakness, low appetite, single case of vomiting, dull pain in the subcostal area on the right. The child is provisionally diagnosed with viral hepatitis. What examination would be the most informative for diagnosis confirmation?

- A. ALT activity in blood
- B. Urine analysis for bile pigments
- C. Feces analysis for stercobilin
- D. Blood test for bilirubin
- E. Thymol turbidity test

17. An infant is 2.5 months old. The onset of the disease was gradual, the child had normal body temperature but presented with slight cough. Within a week the cough intensified, especially at night; on the 12th day the child developed cough fits occurring up to 20 times per day and followed by vomiting. There was one instance of respiratory arrest. Make the diagnosis:

- A. Pertussis
- B. Parainfluenza
- C. Congenital stridor
- D. Respiratory syncytial infection
- E. Adenovirus infection

18. A 14-year-old boy presents with moderate bronchial asthma in its exacerbation period. What drug should be prescribed to stop an acute attack of expiratory dyspnea?

- A. Salbutamol
- B. Cromolyn sodium (Cromoglicic acid)
- C. Dexamethasone
- D. Lasolvan (Ambroxol)
- E. Strophanthine (cardiac glycosides)

19. An infant is 3 weeks old. Since birth there has been observed periodical vomiting within a few minutes after feeding. The amount of vomitive masses does not exceed the volume of previous feeding. The infant has age-appropriate body weight. What is the most likely cause of this symptom?

- A. Pylorospasm
- B. Esophageal chaliasia
- C. Adrenogenital syndrome
- D. Pyloristhenosis
- E. Esophageal achaliasia

20. A newborn with gestational age of 31 weeks presents with hypotonia and depressed consciousness. Hematocrit is 35%, general cerebrospinal fluid analysis shows increased content of erythrocytes and protein, and low glucose. These data correspond with the clinical presentation of:

- A. Intracranial hemorrhage
- B. Meningitis
- C. Sepsis
- D. Anemia
- E. Prenatal infection

21. From urine of a 14-year-old boy with the exacerbation of secondary obstructive pyelonephritis *Pseudomonas aeruginosa* was isolated with a titer of 1000000 microbes per 1 ml. What antibiotic is the most advisable in this case?

- A. Ciprofloxacin
- B. Ampicillin
- C. Cefazolinum
- D. Azithromycin
- E. Chloramphenicol

22. A 3-year-old girl is being treated at a resuscitation unit with diagnosis "acute kidney failure, oligoanuric stage". ECG: high T wave, extended QRS complex, displacement of S-T interval downwards below the isoline. What electrolyte imbalance is it?

- A. Hyperkalemia
- B. Hypokalemia
- C. Hypocalcemia
- D. Hypercalcemia
- E. Hyperphosphatemia

23. Mother of an 8-year-old girl complains that the child is too short and has excessive body weight. Objectively: obesity with fat deposits on the torso and face (round moon-like face), acne, striae on the thighs and lower abdomen, hirsutism. What hormone can cause such symptoms, when in excess?

- A. Cortisol
- B. Thyroxin
- C. Testosterone
- D. Insulin
- E. Glucagon

24. A 9-year-old girl complains of fever up to 38.5°C, headache, inertness, weakness, loss of appetite, stomachache, and frequent painful urination. Provisional diagnosis of acute pyelonephritis is made. Clinical urine analysis: specific gravity - 1016, no protein, leukocytes - 10-15 in the vision field. What investigation method can verify the diagnosis of urinary tract infection?

- A. Bacteriological inoculation of urine
- B. Rehberg test (creatinine clearance test)
- C. Zymnysky test (density measurement of daily diuresis)
- D. Complete blood count
- E. Clinical urine analyses, dynamic testing

25. A newborn has Apgar score of 9. When should the infant be put to the breast?

- A. In the delivery room
- B. After 12 hours
- C. After 2 hours
- D. On the 2nd day
- E. On the 3rd day

26. A woman with blood group B(III) Rh(+) gave birth to a full-term healthy boy. Examination on the 3rd day of the infant's life shows him to have icteric tint to his skin. The child has no problems with suckling, sleep is nondisturbed. The abdomen is soft, the liver protrudes by 2 cm from under the costal margin. Complete blood count: hemoglobin - 200 g/L, erythrocytes - $5.5 \cdot 10^{12}/L$, total

bilirubin - 62 $\mu\text{mol/L}$, indirect bilirubin - 52 $\mu\text{mol/L}$. What condition can be suspected?

- A. Physiologic jaundice
- B. Congenital hepatitis
- C. Hemolytic disease of the newborn due to Rh incompatibility
- D. Biliary atresia
- E. Hemolytic disease of the newborn due to ABO incompatibility

27. A 3-day-old infant with hyperbilirubinemia (428 $\mu\text{mol/L}$) developed disturbances manifesting as periodical excitation and convulsions against the background of inertness, hypotension, hypodynamia, and inhibition of unconditioned reflexes, convergent strabismus, rotational nystagmus, and setting-sun eye phenomenon. What is the most likely cause of such symptoms?

- A. Bilirubin encephalopathy
- B. Craniocerebral injury
- C. Brain tumor
- D. Hydrocephalus
- E. Infantile cerebral paralysis

28. 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 Babkin's reflexes are absent at the affected side. Hemogram indicators are normal. Make the most likely diagnosis:

- A. Inferior distal obstetrical paralysis
- B. Osteomyelitis
- C. Proximal obstetrical paralysis
- D. Complete obstetrical paralysis
- E. Hypoxic-ischemic encephalopathy

29. A 15-year-old girl complains of dizziness and sensation of lack of air that she develops in emotionally straining situations. Relief occurs after she takes corvalol. Objectively: hyperhidrosis and marble-like pattern of the skin of her palms and feet. Clinical and instrumental examination revealed no organic alterations of the central nervous, cardiovascular, and respiratory systems. What provisional diagnosis can be made?

- A. Somatoform autonomic dysfunction
- B. Obstructive bronchitis
- C. Bronchial asthma
- D. Stenosing laryngotracheitis
- E. Acute epiglottitis

30. 10 days after birth a newborn developed sudden fever up to $38,1^{\circ}\text{C}$. Objectively: the skin in the region of navel, abdomen and chest is erythematous; there are multiple pea-sized blisters with no infiltration at the base; isolated bright red moist erosions with epidermal fragments are observed on the periphery. What is the provisional diagnosis?

- A. Epidemic pemphigus of newborn
- B. Syphilitic pemphigus
- C. Streptococcal impetigo
- D. Vulgar impetigo
- E. Atopic dermatitis

31. A 1.5-month-old child on breastfeeding presents from birth with daily vomiting, irregular liquid foamy feces, and flatulence, which are resistant to antibacterial and probiotic therapy; no increase of body mass is observed. The child's condition improved, when breastmilk was substituted. What pathology is it?

- A. Lactase deficiency
- B. Intestinal lamiasis (Giardiasis)
- C. Infectious enteritis
- D. Drug-induced enteritis
- E. Functional dyspepsia

32. A 12-year-old girl after a case of respiratory infection developed dyspnea at rest, paleness of skin. Heart rate is 110/min., BP is 90/55 mm Hg. Heart sounds are muffled. Borders of relative heart dullness: right - the parasternal line, upper - the III rib, left - 1,0 cm outwards from the midclavicular line. Make the provisional diagnosis:

- A. Infectious myocarditis
- B. Functional cardiopathy
- C. Somatoform autonomic dysfunction
- D. Hypertrophic cardiomyopathy
- E. Exudative pericarditis

33. A 5-year-old child has body temperature risen up to febrile numbers, suffers from inertness, weakness. Examination revealed hemorrhage on the skin of limbs and torso. Enlargement of cervical and axillary lymph nodes can be detected. The liver is 4 cm below the costal arch; the spleen is 6 cm below the costal arch. Blood test: erythrocytes - $2.3 \cdot 10^{12}/\text{L}$, Hb- 60 g/L, platelets - $40 \cdot 10^9/\text{L}$, leukocytes - $32.8 \cdot 10^9/\text{L}$, eosinophiles - 1%, band neutrophiles - 1%, segmented neutrophiles - 12%, lymphocytes - 46%, monocytes - 1%, blasts - 40%, Duke's bleeding time test result is 9 min. What examination is necessary to make the diagnosis?

- A. Myelogram (bone marrow biopsy)
- B. Lymph nodes biopsy
- C. Abdominal US
- D. Detection of hepatitis markers
- E. Analysis of dynamic platelet function

34. ECG revealed the following in a 10-year-old child: sharp acceleration of the heart rate - 240/min., P wave overlaps with T wave and deforms it, moderate lengthening of PQ interval, QRS complex is without alterations. What pathology does this child have?

- A. Paroxysmal atrial tachycardia
- B. Atrial hypertrophy
- C. Ventricular hypertrophy
- D. WPW syndrome
- E. Extrasystole

35. 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. Hyperactivity of renin-angiotensin system
- B. Disturbance of water-electrolytic balance
- C. Disturbance of renal circulation
- D. Hypersympathictonia
- E. Increased cortisol level

36. An 9-year-old child was hospitalized for fever up to 39,8°C, inertness, moderate headache, vomiting. Examination revealed meningeal symptoms. Lumbar puncture was performed. The obtained fluid was characterised by increased opening pressure, was transparent, with the cell count of 450 cells per 1 mcL (mainly lymphocytes - 90%), glucose level of 3,6 mmol/l. What agent could have caused the disease in the child?

- A. Enterovirus
- B. *Neisseria meningitidis*
- C. *Mycobacterium tuberculosis*
- D. *Staphylococcus aureus*
- E. *Streptococcus pneumoniae*

37. A 22-day-old infant developed subcutaneous red nodes from 1.0 to 1.5 cm in size on the scalp; later the nodes suppurated. Temperature increased up to 37,7°C, intoxication symptoms appeared, regional lymph nodes enlarged. Complete blood count: anemia, leukocytosis, neutrocytosis, increased ESR. What diagnosis will you make?

- A. Pseudofurunculosis
- B. Pemphigus
- C. Vesiculopustulosis
- D. Scalp phlegmon
- E. -

38. A full-term newborn (born with the body weight of 3900 g at gestational age of 39 weeks) on the first day of his life developed respiratory disturbances: dyspnea, arrhythmic respiration, cyanosis attacks. On examination there is paradoxical respiration observed and left side of the chest lags behind in the act of breathing. On auscultation the respiration is weakened in the lungs on the left. Neurologist diagnosed the patient with left-sided Erb-Duchenne palsy. Complete blood count shows no changes. What is the most likely diagnosis?

- A. Left-sided diaphragm paresis
- B. Congenital pneumonia
- C. Left-sided pneumothorax
- D. Respiratory distress syndrome
- E. Transient tachypnea of the newborn

39. A 12-year-old child had three attacks of acute rheumatic fever accompanied by carditis. Examination revealed the symptoms of chronic tonsillitis, mitral insufficiency, and carious teeth. What is the optimal method of secondary prophylaxis?

- A. Year-round bicillin prophylaxis until the age of 25
- B. Course of cardiotrophic drugs twice a year
- C. Year-round bicillin prophylaxis for 3 years
- D. Tonsillectomy
- E. Oral cavity sanitation

40. A 3-year-old child has been delivered to a hospital with complaints of pain in the legs, fever, loss of appetite. Objectively: pale skin and mucosa, hemorrhagic rash. Lymph nodes are enlarged, painless, dense and elastic, not matted together. Bones, joints, and abdomen are painful. The liver and spleen are enlarged. Hemogram: Hb- 88 g/l, color index - 1,3, platelets - $80 \cdot 10^9/l$, leukocytes - $25,8 \cdot 10^9/l$, lymphoblasts - 70%, ESR- 52 mm/hour. Make the provisional diagnosis:

- A. Acute leukemia
- B. Thrombocytopenic purpura
- C. Acute rheumatic fever
- D. Infectious mononucleosis
- E. Hemorrhagic vasculitis (Henoch-Schonlein purpura)

41. During last several weeks an 11-year-old girl has been complaining of dyspnea and edema of shins and feet after physical exercise. After a long rest or sleep through the night her edemas diminish significantly. On clinical examination there are enlarged liver and rasping systolic murmur over the cardiac area. Blood and urine analyses are without changes. What is the most likely cause of the child's edema?

- A. Heart failure
- B. Angioneurotic edema
- C. Acute pyelonephritis
- D. Hepatocirrhosis
- E. Nephrotic syndrome

42. An 8-year-old girl with complaints of painful urination, frequent low-volume urination, and leukocyturia was diagnosed with acute cystitis. 10 days before the disease onset she was treated by the gynecologist for acute vulvitis. 5 days ago she presented with mild catarrhal symptoms. Her mother ascribes the child's disease to her overexposure to cold. Specify the most likely infection route:

- A.** Ascending
- B.** Descending
- C.** Hematogenic
- D.** Contact
- E.** Lymphogenic

43. A 5-year-old boy complains of severe dyspnea and sensation of lack of air. Objectively the child assumes orthopneic position, presents with marked peripheral cyanosis, drumstick fingers, nail plates resembling a "clock face", the borders of cardiac dullness are bilaterally extended; coarse systolic murmur can be detected over the whole surface of the heart and is especially pronounced in the II intercostal area on the left near the sternum. What disease can be characterized by such presentations?

- A.** Fallot's tetrad
- B.** Dilated cardiomyopathy
- C.** Defect of the interventricular septum
- D.** Primary bacterial endocarditis
- E.** Defect of the interatrial septum

44. A 10-year-old boy is delivered into a polytrauma unit after he received a blunt trauma of the thorax, having fallen from the bicycle. Upon hospitalization his blood pressure is 110/80 mm Hg, heart rate is 96/min. Chest X-ray is noncontributive to the diagnosis. Echocardiogram shows free liquid in the pericardial cavity, in the amount of up to 100 ml. In an hour after the hospitalization the patient started to develop increasing signs of heart failure: jugular venous distention, decreased blood pressure down to 90/70 mm Hg, tachycardia up to 120/min. On auscultation muffled heart sounds. What would be the primary tactics of a physician?

- A.** Pericardiocentesis (pericardial puncture)
- B.** Cardiac glycosides intravenously
- C.** Constant oxygenotherapy
- D.** Diuretics intravenously
- E.** Antibiotics intravenously

45. A healthy child 1 year and 5 months of age is being vaccinated against hepatitis B. The child did not receive the first dose of the vaccine previously, while in the maternity hospital. The doctor makes an individual vaccination schedule for this child and plans the administration of the next dose of the vaccine. What is the minimum interval

between doses of vaccine in this case?

- A.** 1 month
- B.** 6 months
- C.** 2 months
- D.** 3 months
- E.** 12 months

46. A 6-month-old infant is not vaccinated. The physician recommends a DPT (diphtheria, pertussis, tetanus) vaccination but the mother is absolutely against this procedure. Choose the most substantial argument in favor of vaccination:

- A.** Risk of lethal consequences
- B.** Epidemic risk for the others
- C.** Personal professional experience
- D.** High quality of vaccines
- E.** -

47. During administration of planned DPT vaccination the child suddenly developed acute anxiety, signs of pain response, dyspnea, grunting respirations, cutis marmorata, cold sweat. Objectively the child's consciousness is disturbed, heart rate is 150/min., blood pressure is 60/40 mm Hg, heart sounds are muffled. The child was diagnosed with anaphylactic shock. What drug should be administered first?

- A.** Epinephrine
- B.** Lasix (Furosemide)
- C.** Suprastin (Chloropyramine)
- D.** Euphylline (Aminophylline)
- E.** Analgin (Metamizole)

48. Among first-year schoolchildren there was a case of measles registered. A 7-year-old boy from the same group was not vaccinated against measles due to refusal of his parents. His clinical history has no cases of measles in the past and is not contraindicatory to immunobiological agents. Choose the most rational tactics of measles prevention in this schoolboy:

- A.** Measles-Mumps-Rubella vaccine
- B.** Isolation for 20 days
- C.** Antiviral agents
- D.** Antibiotics
- E.** Immunomodulators

1. A 28-year-old woman has been delivered to a hospital with acute pain in the lower abdomen. There was a brief syncope. The delay of menstruation is 2 months. Objectively: the patient has pale skin, BP- 90/50 mm Hg, Ps- 110/min. Lower abdomen is extremely painful. Vaginal examination reveals uterus enlargement. Promtov's sign (pain during bimanual gynecological examination) is positive. Right uterine appendages are enlarged and very painful. Posterior vault hangs over. What is the most likely diagnosis?

- A. Right-sided tubal pregnancy
- B. Right ovary apoplexy
- C. Acute right-sided salpingoophoritis
- D. Pelvioperitonitis
- E. Incipient abortion

2. A parturient woman complains of pain in her mammary gland. In the painful area there is an infiltration 3x4 cm in size with softened center. Body temperature is 38,5°C. What is the most likely diagnosis?

- A. Acute suppurative mastitis
- B. Pneumonia
- C. Pleurisy
- D. Milk retention
- E. Birth trauma

3. A 29-year-old woman came to a gynecologist with complaints of irritability, tearfulness, headache, nausea, occasional vomiting, pain in the heart area, tachycardia attacks, memory impairment, meteorism. These signs appear 6 days before menstruation and disappear the day before menstruation or during its first 2 days. On vaginal examination: the uterus and uterine appendages are without alterations. What diagnosis is the most likely?

- A. Premenstrual syndrome
- B. Algodismenorrhea
- C. Ovarian apoplexy
- D. Genital endometriosis
- E. Neurosis

4. A primigravida at the term of 20 weeks complains of pain in her lower abdomen, smearing blood-streaked discharge from the genital tracts. Uterine tone is increased, fetus is mobile. On vaginal examination: the uterus is enlarged according to the term, uterine cervix is shortened to 0,5 cm, external cervical orifice is open by 2 cm. What is the most likely diagnosis?

- A. Risk of late abortion with hemorrhage
- B. Risk of late abortion without hemorrhage
- C. The process of late abortion
- D. Incomplete late abortion
- E. Attempted late abortion

5. The pregnancy is full term. The body

weight of the parturient woman is 62 kg. Fetus is in a longitudinal lie, the head is engaged to the pelvic inlet. Belly circumference is 100 cm. Uterine fundus height is 35 cm. What body weight of the fetus can be expected?

- A. 3.5 kg
- B. 4 kg
- C. 2.5 kg
- D. 3 kg
- E. 4.5 kg

6. A 22-year-old woman, gravida 1, para 0 arrived with complaints of sharply painful contractions that occur every 4-5 minutes and last for 25-30 seconds. Amniotic fluid did not burst. The fetus is in transverse lie, fetal heartbeats are not affected. Contraction ring is acutely painful, located obliquely at the umbilicus. What is the most likely diagnosis?

- A. Impending uterine rupture
- B. Uterine tetany
- C. Excessive uterine activity during labor
- D. Discoordinated labor
- E. Uterine rupture

7. A 30-year-old multigravida has been in labour for 18 hours. 2 hours ago the pushing stage began. Fetal heart rate is clear, rhythmic, 136/min. Vaginal examination reveals complete cervical dilatation, the fetal head in the pelvic outlet plane. Sagittal suture is in line with obstetric conjugate, the occipital fontanel is near the pubis. The patient has been diagnosed with primary uterine inertia. What is the further tactics of labour management?

- A. Outlet forceps
- B. Labour stimulation
- C. Cesarean section
- D. Skin-head Ivanov's forceps
- E. Vacuum extraction of the fetus

8. A 20-year-old woman on the 10th day after her discharge from the maternity ward developed fever up to 39°C and pain in her left mammary gland. On examination the mammary gland is enlarged, in its upper outer quadrant there is a hyperemic area. In this area a dense spot with blurred margins can be palpated. The patient presents with lactostasis and no fluctuation. Lymph nodes in the right axillary crease are enlarged and painful. Specify the correct diagnosis:

- A. Lactational mastitis
- B. Abscess
- C. Erysipelas
- D. Dermatitis
- E. Tumor

9. A 16-year-old girl has primary amenorrhea, no pubic hair growth, normally developed mammary glands; her genotype is

46 XY; uterus and vagina are absent. What is your diagnosis?

- A. Testicular feminization syndrome
- B. Mayer-Rokitansky-Kuster-Hauser syndrome
- C. Cushing syndrome
- D. Sheehan syndrome
- E. Cushing disease

10. 6 hours ago the waters of a 30-year-old gravida 1, para 0, burst; her preliminary period was pathologic and lasted for over 2 days; the term of pregnancy is 39 weeks. No labor activity is observed. Fetal head presents above the pelvic inlet. Fetal heartbeats are 142/min., clear and rhythmic. On vaginal examination the uterine cervix is not dilated. What further tactics should the doctor choose?

- A. Perform cesarean section
- B. Induce cervical dilation with prostaglandins
- C. Stimulate the labor with oxytocin
- D. Wait for the onset of spontaneous labor
- E. Prolong the pregnancy, while providing antibacterial treatment

11. A 23-year-old woman came to the gynecologist with complaints of blood smears from her genital tracts that have been observed for a long time. Her menstruation has been delayed for 8 weeks. Examination shows the uterine body to be enlarged up to 14 weeks of pregnancy. US detected a vesicular mole. What tactics should the doctor choose?

- A. Curettage of the uterine cavity
- B. Hormonal treatment
- C. Hemostatic treatment
- D. Supravaginal uterine amputation
- E. Uterectomy

12. A 46-year-old woman came to a maternity clinic with complaints of moderate blood discharge from the vagina, which developed after the menstruation delay of 1,5 months. On vaginal examination: the cervix is clean; the uterus is not enlarged, mobile, painless; appendages without changes. Make the diagnosis:

- A. Dysfunctional uterine bleeding
- B. Adenomyosis
- C. Ectopic pregnancy
- D. Submucous uterine myoma
- E. Cancer of the uterine body

13. A 30-year-old woman complains of amenorrhea that lasts for 2 years after she has given birth, loss of hair and body weight. The labor was complicated with hemorrhage caused by uterine hypotonia. Objectively the patient is of asthenic type, her external genitalia are hypoplastic, the uterine body is small in size and painless. No uterine

appendages can be detected. What is the most likely diagnosis?

- A. Sheehan's syndrome (postpartum hypopituitarism)
- B. Ovarian amenorrhea
- C. Turner's syndrome
- D. Ovarian exhaustion syndrome
- E. Galactorrhea-amenorrhea syndrome

14. A 28-year-old woman complains of increased intervals between menstruations, up to 2 months, and hirsutism. Gynecological examination revealed the following: ovaries are enlarged, painless, and dense; no alterations of the uterus. US of the lesser pelvis: ovaries are 4-5 cm in diameter, with numerous enlarged follicles on the periphery. X-ray of the skull base: sellar region is widened. What is the most likely diagnosis?

- A. Stein-Leventhal syndrome (polycystic ovarian syndrome)
- B. Algodismenorrhea
- C. Sheehan syndrome (postpartum hypopituitarism)
- D. Premenstrual syndrome
- E. Morgagni-Stewart-Morel syndrome (metabolic craniopathy)

15. The gynecology unit received a patient with uterine bleeding that started 6 hours after induced abortion at the term of 11-12 weeks. Objectively the skin is pale, pulse is 100/min., blood pressure is 100/70 mm Hg. On vaginal examination the uterus is painless, its enlargement corresponds to the 10th week of pregnancy; uterine cervix is dilated enough to let in one finger; there are fragments of the fertilized ovum. What actions should be taken next:

- A. Urgent repeated curettage of the uterine cavity
- B. Uterotonic drugs
- C. Treatment for acute anemia
- D. Antibacterial agents
- E. Prescribe rest and continue to monitor the patient's condition

16. A woman came to the general practitioner with complaints of fatigability, significant weight loss, weakness, and loss of appetite. She has been presenting with amenorrhea for the last 8 month. One year ago she gave birth to a live full-term child. Blood loss during delivery was 2 liters. The woman received blood transfusion and blood components. What is the most likely diagnosis?

- A.** Sheehan's syndrome (postpartum hypopituitarism)
- B.** Stein-Leventhal syndrome (polycystic ovary)
- C.** Turner's syndrome
- D.** Homologous blood syndrome
- E.** Somatoform autonomic dysfunction

17. A 22-year-old woman complains of itching and profuse discharge from her genital tracts. The condition developed 10 days ago after a sexual contact. Bacterioscopy of a discharge sample detected trichomonads. What drug should be prescribed for treatment in this case?

- A.** Metronidazole
- B.** Ampicillin
- C.** Erythromycin
- D.** Zovirax (Acyclovir)
- E.** Valcyclovir

18. 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 - 0.033 g/L. Make the diagnosis:

- A.** Mild preeclampsia
- B.** Moderate preeclampsia
- C.** Pregnancy hypertension
- D.** Severe preeclampsia
- E.** Pregnancy edema

19. A 37-year-old woman complains of acute pain in the genital area, swelling of the labia, pain when walking. Objectively: body temperature is 38,7°C, Ps- 98/min. In the interior of the right labia there is a dense, painful tumor-like formation 5,0x4,5 cm in size, the skin and mucous membrane of genitals are hyperemic, there is profuse foul-smelling discharge. What is the most likely diagnosis?

- A.** Acute Bartholinitis
- B.** Labial furuncle
- C.** Acute vulvovaginitis
- D.** Bartholin gland cyst
- E.** Carcinoma of vulva

20. A 14-year-old girl has been delivered to a gynecological department with complaints of profuse blood discharge from her genital tract for 2 weeks. Anamnesis: menstruation since 13, irregular, painful, profuse; the last one was 2 months ago. Objectively: pale skin and mucosa, BP- 100/60 mm Hg, Hb- 108 g/l. The abdomen is soft and painless on palpation. Rectal examination revealed no pathologies of reproductive organs. What condition is it?

- A.** Juvenile uterine hemorrhage (Dysfunctional)
- B.** Hypomenstrual syndrome
- C.** Inflammation of uterine appendages (Pelvic inflammatory disease)
- D.** Pelviperitonitis
- E.** Endometritis

21. A 15-year-old adolescent girl came to the gynecologist with complaints of painful menstruations that are accompanied by nausea, vomiting, and dizziness. Her menarche was at 12. Menstruations became painful since she was 14, remain regular. What treatment should be prescribed in this case?

- A.** Analgesics, antispasmodics, antiprostaglandine therapy
- B.** Antiinflammatory treatment only
- C.** Antihemorrhagic agents
- D.** Antiandrogen therapy
- E.** Vitamin supplements

22. A 20-year-old woman, gravida 2, para 1 has been in labor for 4 hours. Her condition is satisfactory. Moderately painful contractions occur every 3 minutes and last for 35-40 seconds. The waters have not burst yet. The fetus is in longitudinal position. Fetal heartbeats are 136/min., clear and rhythmic. Major segment of the fetal head is engaged to the pelvic inlet. Vaginal examination shows smooth cervix of 6cm, amniotic sac is intact, sagittal suture is in the left oblique diameter, occipital fontanel is on the right near the symphysis pubis. What stage of the labor is it?

- A.** Active phase of the first stage of normal labor
- B.** Latent phase of the first stage of normal labor
- C.** The second stage of normal labor
- D.** Precursors of childbirth
- E.** Preliminary stage

23. A multigravida at 39 weeks of gestation presenting with regular labour activity for 8 hours has been delivered to a hospital; the waters broke an hour ago. She complains of headache, seeing spots. BP is 180/100 mm Hg. Urine test results: protein - 3,3 g/l, hyaline cylinders. Fetal heart rate is 140/min, rhythmical. Vaginal examination reveals complete cervical dilatation, the fetal head is on the pelvic floor, sagittal suture is in line with obstetric conjugate, the occipital fontanel is under the pubis. What is the optimal tactics of labour management?

- A.** Outlet forceps
- B.** Cavity forceps
- C.** Cesarean section
- D.** Vacuum extraction of the fetus
- E.** Conservative labour management

24. An 18-year-old woman complains of pain in her lower abdomen, profuse purulent discharge from the vagina, temperature rise up to $37,8^{\circ}\text{C}$. Anamnesis states that she had a random sexual contact the day before the signs appeared. She was diagnosed with acute bilateral adnexitis. On additional examination: leukocytes are present throughout all vision field, bacteria, diplococci with intracellular and extracellular position. What is the most likely agent in the given case?

- A.** *Neisseria gonorrhoeae*
- B.** *Escherichia coli*
- C.** *Chlamydia trachomatis*
- D.** *Trichomona vaginalis*
- E.** *Staphylococcus aureus*

25. It is the 3rd day after the normal term labor; the infant is rooming-in with the mother and is on breastfeeding. Objectively: the mother's general condition is satisfactory. Temperature is $36,4^{\circ}\text{C}$, heart rate is 80/min., BP is 120/80 mm Hg. Mammary glands are soft and painless; lactation is moderate, unrestricted milk flow. The uterus is dense, the uterine fundus is located by 3 fingers width below the navel. Lochia are sanguinoserous, moderate in volume. Assess the dynamics of uterine involution:

- A.** Physiological involution
- B.** Subinvolution
- C.** Lochiometra
- D.** Pathologic involution
- E.** Hematometra

26. A 6-year-old girl came to a general practitioner with her mother. The child complains of burning pain and itching in her external genitalia. The girl was taking antibiotics the day before due to her suffering from acute bronchitis. On examination: external genitalia are swollen, hyperemic, there is white deposit accumulated in the folds. The most likely diagnosis is:

- A.** Candidal vulvovaginitis
- B.** Trichomoniasis
- C.** Nonspecific vulvitis
- D.** Helminthic invasion
- E.** Herpes vulvitis

27. A 22-year-old woman complains of amenorrhea for 8 months. Anamnesis states that menarche occurred at the age of 12,5. Since the age of 18 the patient has a history of irregular menstruation. The patient is nulligravida. The mammary glands are developed properly, nipples discharge drops of milk when pressed. Hormone test: prolactin level is 2 times higher than normal. CT reveals a bulky formation with diameter of 4 mm in the region of sella. What is the most likely diagnosis?

- A.** Pituitary tumour
- B.** Lactational amenorrhea
- C.** Stein-Leventhal syndrome (polycystic ovary syndrome)
- D.** Sheehan's syndrome (postpartum hypopituitarism)
- E.** Cushing's disease

28. A 30-year-old woman complains of milk discharge from her breasts and no menstruation for the last 5 months. One physiologic childbirth was 4 years ago. There are no maldevelopments of mammary glands. Bimanual examination revealed diminished uterus and normal sized ovaries. MRI-scan shows no brain pathologies. Thyroid-stimulating hormone is within normal limits. Serum prolactin is high. What is the most likely diagnosis?

- A.** Hyperprolactinemia
- B.** Hypothyroidism
- C.** Polycystic ovaries
- D.** Pituitary adenoma
- E.** Sheehan's syndrome (postpartum hypopituitarism)

29. A 25-year-old woman during self-examination detected a tumor in the upper external quadrant of her right mammary gland. On palpation: painless, dense, mobile growth 2 cm in diameter is detected in the mammary gland; no changes in the peripheral lymph nodes are observed. On US of the mammary glands: in the upper external quadrant of the right mammary gland there is a space-occupying lesion of increased echogenicity 21x18 mm in size. The most likely diagnosis is:

- A.** Fibrous adenoma
- B.** Breast cyst
- C.** Diffuse mastopathy
- D.** Breast cancer
- E.** Mastitis

30. A 45-year-old woman came to the maternity clinic with complaints of periodical pains in her mammary glands that start 1 day before menstruation and stop after the menstruation begins. Palpation of the mammary glands detects diffuse nodes predominantly in the upper outer quadrants. What is the most likely diagnosis?

- A.** Fibrocystic mastopathy
- B.** Breast cancer
- C.** Mastitis
- D.** Hyperprolactinemia
- E.** Breast cyst

31. A woman complains of temperature increase up to 39°C , sharp pains in her lower abdomen, and sanguinopurulent discharge from her genital tracts. From her case history it is known that 6 days ago she underwent illegal abortion. Objectively her blood

pressure is 100/60 mm Hg, pulse is 110/min. Abdominal rigidity, rebound tenderness (Bloomberg's sign), and painful palpation of the lower abdomen are observed. On bimanual examination the uterus is enlarged up to 7 weeks of pregnancy, painful, and soft; posterior vaginal fornix overhangs. Make the diagnosis:

- A. Pelviperitonitis
- B. Endometritis
- C. Acute adnexitis
- D. Pyosalpinx
- E. Metroendometritis

32. A 14-year-old girl came to a general practitioner with complaints of weakness, loss of appetite, headache, rapid fatigability. Her last menstruation was profuse and lasted for 14 days after previous delay of 2 months. Objectively: the skin is pale, heart rate is 90/min., BP is 110/70 mm Hg, Hb is 88 g/l. Rectal examination: the uterus and its appendages are without changes, no discharge from the genital tracts. What complication occurred in the patient?

- A. Posthemorrhagic anemia
- B. Somatoform autonomic dysfunction of hypotonic type
- C. Migraine
- D. Gastritis
- E. Dysmenorrhea

33. A postpartum woman on the 12th day after the normal delivery complains of pain localized in her left gastrocnemius muscle. Body temperature is $37,2^{\circ}\text{C}$; pulse is 85/min, rhythmic; blood pressure is 128/80 mm Hg. Mammary glands are soft and painless. The uterus is behind the pubis. The left leg in the area of gastrocnemius muscle is by 3 cm larger than the right leg in the diameter. Internal organs present no pathologies. What complication can be suspected?

- A. Deep vein thrombosis of the shin
- B. Iliofemoral thrombosis
- C. Varicose veins of lower extremities
- D. Endometritis
- E. Myositis

34. Examination of a Rh-negative pregnant woman at 32 weeks of gestation revealed a four-time rise of Rh-antibody titer within 2 last weeks; the titer is 1:64. The first two pregnancies resulted in antenatal fetal death due to hemolytic disease. What is the optimal tactics of pregnancy management?

- A. Early delivery
- B. Delivery at 37 weeks of gestation
- C. Screening for Rh-antibodies in 2 weeks and urgent delivery in case of further increase of antibody titer
- D. Introduction of anti-Rh (D) immunoglobulin
- E. Ultrasound for signs of hemolytic disease of the fetus

35. A 55-year-old woman came to a gynecologist with complaints of leukorrhea and bloody discharge from the vagina after 5 years of menopause. Anamnesis states no pregnancies. Bimanual examination: the uterus and uterine appendages are without changes. During diagnostic curettage of the uterine cavity the physician scraped off encephaloid matter. What is the most likely diagnosis in this case?

- A. Endometrial carcinoma
- B. Adenomyosis
- C. Subserous uterine myoma
- D. Cervical carcinoma
- E. Ovarian carcinoma

36. A 24-year-old pregnant woman on her 37th week of pregnancy has been delivered to a maternity obstetric service with complaints of weak fetal movements. Fetal heartbeats are 95/min. On vaginal examination the uterine cervix is tilted backwards, 2 cm long, external orifice allows inserting a fingertip. Biophysical profile of the fetus equals 4 points. What tactics of pregnancy management should be chosen?

- A. Urgent delivery via cesarean section
- B. Treatment of placental dysfunction and repeated analysis of the fetal biophysical profile on the next day
- C. Doppler measurement of blood velocity in the umbilical artery
- D. Urgent preparation of the uterine cervix for delivery
- E. Treatment of fetal distress, if ineffective, then elective cesarean section on the next day

37. During regular preventive gynecological examination a 30-year-old woman was detected to have dark blue punctulated "perforations" on the vaginal portion of the uterine cervix. The doctor suspects endometriosis of the vaginal portion of the uterine cervix. What investigation method would be most informative for diagnosis confirmation?

- A. Colposcopy, target biopsy of the cervix
- B. US of the lesser pelvis
- C. Hysteroscopy
- D. Curettage of the uterine cavity
- E. Hormone testing

38. A 26-year-old woman came to a gynecologist for a regular check-up. She has

no complaints. Per vaginum: the uterus lies in anteflexion, not enlarged, dense, mobile, painless. On the left from the uterus in the area of uterine appendages there is a mobile painless outgrowth that can be moved independently from the uterus. On the right the appendages cannot be detected. What additional investigation would be informative for diagnosis clarification?

- A.** Ultrasound of the lesser pelvis
- B.** Metrosalpingography
- C.** Examination for urogenital infection
- D.** Colposcopy
- E.** Colonoscopy

39. A postparturient woman, who has been breastfeeding for 3 weeks, made an appointment with the doctor. For the last 6 days she has been feeling unwell, complains of body temperature of 38-39°C, general weakness; within the last 2 days she developed pain and redness in the area of her right mammary gland. Examination revealed her mammary gland to be significantly enlarged and deformed; breast tissue fluctuations and lymphadenitis are observed. What type of mastitis is the most likely?

- A.** Phlegmonous mastitis
- B.** Serous mastitis
- C.** Infiltrative mastitis
- D.** Lactostasis
- E.** Mammary edema

40. On the 9th day after childbirth the obstetric patient developed high fever up to 38°C. She complains of pain in the right mammary gland. The examination revealed the following: a sharply painful infiltrate can be palpated in the right mammary gland, the skin over the infiltrate is red, subareolar area and nipple are swollen and painful. What is your diagnosis?

- A.** Abscess of the right mammary gland
- B.** Mastopathy
- C.** Cancer of the right mammary gland
- D.** Serous mastitis
- E.** Fibrous cystic degeneration of the right mammary gland

41. A woman is on the 32nd week of her

second pregnancy. She complains of fever, chills, nausea, vomiting, lumbar pain, and dysuria. Costovertebral angle tenderness is present on both sides. Urine analysis: pyuria, bacteriuria. Blood test: leukocytosis. What is the most likely diagnosis?

- A.** Gestational pyelonephritis
- B.** Cystitis
- C.** Pyelitis
- D.** Glomerulonephritis
- E.** Latent bacteriuria

42. A 32-year-old pregnant woman at the term of 5-6 weeks was vaccinated against influenza along with her whole family. At that time she was not aware of her pregnancy. The pregnancy is wanted. The woman needs an advice from the family doctor regarding the maintenance of her pregnancy, namely whether there is a risk of fetal malformations because of received vaccination. What advice should the doctor give in this case?

- A.** Vaccination against influenza is safe during pregnancy
- B.** Therapeutic abortion is recommended
- C.** Immediate ultrasound of the lesser pelvis is necessary
- D.** Test for antibodies against influenza virus is necessary
- E.** An infectious diseases specialist must be consulted

43. A 17-year-old girl has made an appointment with the doctor. She plans to begin her sex life. No signs of gynecological pathology were detected. In the family history there was a case of cervical cancer that occurred to the patient's grandmother. The patient was consulted about the maintenance of her reproductive health. What recommendation will be the most helpful for prevention of invasive cervical cancer?

- A.** Vaccination against human papillomavirus (HPV)
- B.** Vitamins, calcium, omega-3
- C.** Immunomodulators
- D.** Antiviral and antibacterial drugs
- E.** Timely treatment of sexually transmitted diseases

1. A regional cardiologist is given a task to develop a plan for preventive measures aimed at decreasing cardiovascular mortality rates. What measures should be planned for secondary prevention?

- A. Prevention of recurrences and complications
- B. Referring patients for sanatorium-and-spa treatment
- C. Prevention of diseases
- D. Referring patients for inpatient treatment
- E. Optimization of lifestyle and living conditions

2. Caries morbidity rate is 89% among residents of a community. It is determined that fluorine content in water is 0.1 mg/L. What preventive measures should be taken?

- A. Water fluorination
- B. Tooth brushing
- C. Fluorine inhalations
- D. Sealant application
- E. Introduce more vegetables to the diet

3. A 39-year-old man, a battery attendant, suddenly developed weakness, loss of appetite, nonlocalized colicky abdominal pains, and nausea. Objectively his skin is gray; there is pink-gray stripe on his gums; the stomach is soft and sharply painful. Blood test detected erythrocytes with basophilic stippling and anemia. The patient has a history of peptic ulcer disease of the stomach. There is tendency to constipation. What is the most likely provisional diagnosis?

- A. Saturnism (lead poisoning)
- B. Acute appendicitis
- C. Perforation of gastric ulcer
- D. Acute cholecystitis
- E. Chronic alcoholism

4. A 9-month-old infant presents with delayed tooth eruption and fontanel closure, weakness, and excessive sweating. What type of hypovitaminosis is the most likely in this child?

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

5. During the periodic medical examination an assembly fitter (works on soldering details) didn't report any health problems. Closer examination revealed signs of asthenic-vegetative syndrome. Blood included red blood cells with basophilic aggregations and a somewhat higher number of reticulocytes, urine had a high concentration of delta-aminolevulinic acid.

The complex of symptoms indicates the initial stage of chronic intoxication with:

- A. Lead
- B. Manganese
- C. Mercury
- D. Tin
- E. Ethanol

6. A 10-year-old girl exhibits high level of physical development ($M + 3\sigma$), her body length increased by 10 cm within a year (which is double the norm for her age group), the number of permanent teeth corresponds with the age norm (20), the development of her secondary sex characteristics is three years ahead of her age (Ma, P, Ax, Menarche). Development rate ahead of her biological age can occur due to:

- A. Endocrine disorders
- B. Acceleration
- C. Certain components of her diet
- D. Sports training
- E. Deficient hygienic education

7. Examination of a group of persons living on the same territory revealed the following common symptoms: dark-yellow pigmentation of the tooth enamel, diffuse osteoporosis of bone apparatus, ossification of ligaments and joints, functional disorders of the central nervous system. This condition may be caused by the excessive concentration of the following microelement in food or drinking water:

- A. Fluorine
- B. Copper
- C. Nickel
- D. Iodine
- E. Cesium

8. 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 the most likely?

- A. Cataract
- B. Conjunctivitis
- C. Keratitis
- D. Blepharospasm
- E. Progressive myopia

9. The inpatient surgery unit has introduced the method of laparoscopic cholecystectomy into its practice. As the result the average duration of postoperative care provided to the patients could be reduced to 3.4 ± 0.8 days compared to 7.3 ± 1.1 days

that were required after non-laparoscopic cholecystectomy. What method of medical statistics can confirm the statistical significance of the difference between these two estimates?

- A. Calculation of Student's confidence interval
- B. Calculation of correlation coefficient
- C. Calculation of standardized ratio
- D. Calculation of average values (measures of central tendency)
- E. Calculation of relative values

10. In April during the medical examination of various population groups, 27% of individuals presented with low working ability and rapid fatigability. The following symptoms were observed in the affected individuals: swollen friable gingiva that bleeds when pressed, hyperkeratosis follicularis not accompanied by skin dryness. These symptoms most likely result from the following pathology:

- A. C-hypovitaminosis
- B. Parodontosis
- C. A-hypovitaminosis
- D. B₁-hypovitaminosis
- E. Polyhypovitaminosis

11. During regular check-up the doctor examines a young woman, a student, with height of 162 cm and weight of 59 kg. She complains that in the evening she becomes unable to see clearly the objects around her. Objectively her skin is dry, presents with hyperkeratosis. Her daily ration has the following vitamin content: vitamin A - 0.5 mg, vitamin B₁ - 2.0 mg, vitamin B₂ - 2.5 mg, vitamin B₆ - 2 mg, vitamin C - 70 mg. Make the diagnosis:

- A. A-hypovitaminosis
- B. B₁-hypovitaminosis
- C. B₂-hypovitaminosis
- D. B₆-hypovitaminosis
- E. C-hypovitaminosis

12. A man works in casting of nonferrous metals and alloys for 12 years. In the air of working area there was registered high content of heavy metals, carbon monoxide, and nitrogen. During periodic health examination the patient presents with asthenovegetative syndrome, sharp pains in the stomach, constipations, pain in the hepatic area. In urine: aminolevulinic acid and coproporphyrin are detected. In blood: reticulocytosis, low hemoglobin level. Such intoxication is caused by:

- A. Lead and lead salts
- B. Tin
- C. Carbon monoxide
- D. Nitric oxide
- E. Zinc

13. Due to introduction of a new treatment method, average duration of therapy in the experimental group was 12.3 ± 0.2 days compared to 15.4 ± 0.4 days in the control group that was treated by the old method. What calculations should be made to estimate the statistical significance of the difference in the results?

- A. T-test (Student's t-distribution)
- B. Sign test (Z-test)
- C. Matching factor (chi-squared test)
- D. Wilcoxon T-test
- E. Kolmogorov-Smirnov test

14. A patient, who had eaten canned mushrooms (honey agaric) three days ago, developed vision impairment (diplopia, mydriasis), speech disorder, disturbed swallowing. What type of food poisoning occurred in the patient?

- A. Botulism
- B. Food toxicoinfection
- C. Fusariotoxicosis
- D. Honey agaric poisonong
- E. Lead salts poisoning

15. Establishments participating in medical examinations include: medical and preventive treatment facilities, hygiene and preventive treatment facilities, sociomedical expert committees, Ministry of Defence medical committees, Ministry of Domestic Affairs medical committees, forensic medicine agency, etc. Specify what service deals with sociomedical assessment of temporary disability:

- A. Medical and preventive treatment facilities
- B. Hygiene and preventive treatment facilities
- C. Sociomedical expert committees
- D. Ministry of Defence medical committees
- E. Ministry of Domestic Affairs medical committees

16. During assessment of work conditions at the factory manufacturing mercury thermometers, the content of mercury vapors in the air of the working area is revealed to exceed the maximum concentration limit. Specify the main pathway of human body exposure to mercury:

- A. Respiratory organs
- B. Intact skin
- C. Damaged skin
- D. Gastrointestinal tract
- E. Mucous tunics

17. During health assessment of car drivers and police officers on point duty, the physicians detected carboxyhemoglobin in the blood of the patients, weakened reflex responses, disturbed activity of a number of enzymes. Revealed professional health disorders are most likely to be associated with the effect of:

- A. Carbon monoxide
- B. Sulfurous anhydride
- C. Mental stress
- D. Aromatic hydrocarbons
- E. Nitric oxide

18. In the process of hiring, a prospective employee has undergone preventive medical examination and was declared fit to work in this manufacturing environment. What type of preventive medical examination was it?

- A. Preliminary
- B. Scheduled
- C. Periodical
- D. Specific
- E. Comprehensive

19. An employee has been sick for 4 months, further treatment is necessary, the patient is unable to work. Who is authorized to provide further disability examination of this patient?

- A. Sociomedical expert committee
- B. Medical consultative board
- C. Physician in charge and the head of the department
- D. Chief physician of a medical facility
- E. Deputy chief responsible for disability examination

20. On laboratory investigation of a pork sample there is 1 dead trichinella detected in 24 sections. This meat should be:

- A. Handed over for technical disposal
- B. Allowed for sale with no restrictions
- C. Processed and sold through public catering network
- D. Processed for boiled sausage production
- E. Frozen until the temperature of -10°C is reached in the deep layers, with subsequent exposure to cold for 15 days

21. Examination of a 43-year-old man objectively revealed pallor of skin and mucous membranes, loss of tongue papillae, transverse striation of fingernails, cracks in the mouth corners, tachycardia. Blood

test results: Hb- 90 g/l, anisocytosis, poikilocytosis. The most likely causative factor of this condition is the inadequate intake of:

- A. Iron
- B. Copper
- C. Zinc
- D. Magnesium
- E. Selene

22. To assess the effectiveness of medical technologies and determine the power and direction of their effect on the public health indicators, the research was conducted to study the immunization rate of children and measles incidence rate by district. What method of statistical analysis should be applied in this case?

- A. Calculation of correlation coefficient
- B. Calculation of morbidity index among the nonvaccinated
- C. Calculation of coefficient of agreement
- D. Calculation of standardized ratio
- E. Calculation of statistical significance of the difference between two estimates

23. Posture of an 11-year-old boy was determined during preventive examination. The child presents with curled forward rounded shoulders, the head is bowed forward, the thorax is flattened, the stomach is bulging. In the vertebral column there are deepened cervical and lumbar flexures. What posture does the child have?

- A. Kyphosis
- B. Lordosis
- C. Stooping
- D. Corrected
- E. Normal

24. The objective of a statistical research was to find out to what extent the population peruses the available medical services. For this purpose 300 residents of the area were interviewed. Information was collected by means of a special questionnaire. What method of collecting information was used by the researchers?

- A. Anamnestic (history-taking)
- B. Immediate registration
- C. Immediate examination
- D. Doing extracts
- E. -

25. A 47-year-old man is employed at the weaving workshop, has 15-year-long record of service at this factory; his work conditions are associated with high-frequency and high-intensity noise. During periodical examination he was diagnosed with occupational deafness. What are the grounds for making such a diagnosis?

- A.** Audiometry data and hygienic assessment of working environment
- B.** Record of service at this factory
- C.** Noise characteristic at this factory
- D.** Central nervous system examination results
- E.** Inner ear examination results

26. Estimation of community health level involved analysis of a report on diseases registered among the population of district under charge (reporting form 12). What index is calculated based on this report?

- A.** Prevalence
- B.** Index of pathological affection
- C.** Index of morbidity with temporary disability
- D.** Index of hospitalized morbidity
- E.** Index of basic non-epidemic morbidity

27. A 60-year-old man has a diet consisting of unvaried food staples: mostly cereals, potato, pasta; few vegetables and little fats (especially animal fats). During medical examination he complains of deterioration of his twilight vision. This condition can be caused by lack of:

- A.** Retinol
- B.** Amino acids
- C.** Fats
- D.** Calcium
- E.** Carbohydrates

28. A 52 year old man came to see his family physician complaining of pain in the chest. After taking history and performing physical exam the doctor decided to direct the patient to cardiologist for a consultation. What level of medical care is being proposed to the patient?

- A.** Secondary healthcare
- B.** Emergency healthcare
- C.** Primary healthcare
- D.** Tertiare healthcare
- E.** Palliative care

29. A 30-year-old woman made an appointment with the family doctor for scheduled vaccination of her 2-year-old child. What type of healthcare provides such medical services?

- A.** Primary healthcare
- B.** Emergency aid
- C.** Secondary healthcare
- D.** Tertiary healthcare
- E.** Palliative care

30. 40-50 minutes after the completion of repair works conducted in a closed garage, with car engine running, the repair workers developed severe headache in the temporal area, nausea, tinnitus, vertigo, etc. These symptoms are characteristic of acute poisoning with:

- A.** Carbon monoxide
- B.** Aldehydes
- C.** Organochlorides
- D.** Hydrogen sulfide
- E.** Fluoride

31. A 45-year-old veterinary worker has made an appointment with the doctor for regular examination. In his duties he frequently deals with animals, however he denies working with rabies-affected animals. Previously he has received no antirabic vaccination. What should the doctor recommend in this case?

- A.** Preventive immunization with antirabic vaccine
- B.** Vaccination in case of contact with sick animal
- C.** Preventive immunization with rabies immunoglobulin
- D.** Administration of antirabic vaccine and rabies immunoglobulin
- E.** Preventive immunization with anti-rabies serum

32. A 28-year-old woman has made an appointment with the family doctor to receive vaccination against influenza. However, having collected the patient's medical history, the doctor claimed this procedure to be absolutely contraindicated for this woman. What anamnestic data is the absolute contraindication to vaccination?

- A.** Egg white intolerance
- B.** Pregnancy at 30 weeks
- C.** Blood hemoglobin - 109 g/L
- D.** Body temperature - 37.2°C
- E.** Psoriasis in the remission phase