

1. A 10-month-old boy is poorly gaining weight. His mother complains about his constant persistent cough. Sputum is thick and viscous. The boy had pneumonia three times. His sweat chloride levels are over 80 mEq/L. What is the most likely diagnosis in this case?

- a. Bronchial asthma
- b. Mucoviscidosis (cystic fibrosis)**
- c. Congenital lung abnormality
- d. Chronic bronchitis
- e. A foreign body in the bronchi

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

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

3. A 35-year-old woman has been prescribed ampicillin for pneumonia. Thirty minutes after an intramuscular injection of the drug, she felt sharp weakness and developed cough, dyspnea, and chest pain. Objectively, she has cyanosis, edema of the eyelids, and a red rash on her face. Pulse - 120/min., blood pressure - 70/20 mm Hg. Her heart sounds are dull. Her respiration is rapid and shallow, with heterogeneous wet crackles. Varicose veins are observed on the right lower leg. What is the most likely cause of the sudden deterioration of the woman's condition?

- a. Anaphylactic shock**
- b. Quincke's edema
- c. Asthma attack
- d. Pulmonary embolism
- e. Urticaria

4. 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. Cystoscopy 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. Hypoplasia of the right kidney
- c. Ectopic right ureteral orifice
- d. Agenesis of the right ureter
- e. Dystopia of the right kidney

5. A 54-year-old man was hospitalized with complaints of a sudden severe headache in the back of his head and vomiting. He has a history of moderate hypertension and takes hypothiazide. Three days ago he came to a therapist, complaining of an intense headache, which was relieved with an analgesic. Objectively, his consciousness is clouded and his left pupil is dilated. He presents with marked photophobia, tense neck muscles, and left-sided hemiparesis with increased muscle tone and reflexes. His temperature is low. No rash is observed in the patient. His blood pressure is 230/130 mm Hg, pulse - 50/min., respiratory rate - 12/min. Make the diagnosis:

- a. Acute subdural hematoma**
- b. Myasthenia
- c. Acute bacterial meningitis
- d. Migraine
- e. Multiple sclerosis

6. A 36-year-old woman complains of pain in her joints and muscles, loss of appetite, constipations, rapid fatigability, and a subfebrile body temperature. Objectively, she has dysphagia, symmetrical arthritis, skin thickening on her hands and feet, atrophy and small ulcers on the fingertips, Raynaud's syndrome, telangiectasia. What disease is the cause of such a clinical presentation?

a. Systemic lupus erythematosus

**b. Systemic scleroderma**

c. Rheumatoid arthritis

d. Dermatomyositis

e. Raynaud's disease

7. A 65-year-old woman for 5 weeks has been presenting with a progressing painless jaundice, skin itch, weight loss of 10 kg, and acholia. Palpation detects positive Courvoisier's sign. Make the provisional diagnosis:

a. Viral hepatitis

b. Malaria

c. Liver cancer

**d. Pancreatic cancer**

e. Gallbladder cancer

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

a. Eyelid abscess

b. Conjunctivitis

**c. Stye**

d. Blepharitis

e. Chalazion

9. A baby is 4 days old. The baby's condition after birth is severe (tonic-clonic seizures, no newborn reflexes). The muscle tone is asymmetrical. The large fontanelle exhibits increased pulsation and is 3x3 cm in size. The baby's respiration rate is 32/min., with apnea episodes. The heart sounds are clear and rhythmic, the heart rate is 122/min. Neurosonogram shows enlarged lateral ventricles with echo-positive inclusions in the ependyma. What is the most likely cause of the child's condition in this case?

**a. Intraventricular hemorrhage**

b. Respiratory distress syndrome

c. Meningitis

d. Hydrocephalus

e. Spinal cord birth injury

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

**a. Blind randomized controlled study**

b. Double-blind randomized controlled study

c. Case-control study

d. Prospective cohort study

e. Cross-sectional study

11. A regional cardiologist is tasked with the development of a plan for medioprophylactic measures aimed at decrease of cardiovascular mortality. What measures should be planned for secondary prevention?

a. Optimization of life style and living conditions

b. Referring patients for sanatorium-and-spa treatment

c. Prevention of diseases

**d. Prevention of recurrences and complications**

e. Referring patients for in-patient treatment

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

a. Case-control study

b. Case report

c. Cohort study

d. Case series report

e. Experimental study

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

a. Acute appendicitis

b. Acute adnexitis

c. Acute cystitis

d. Appendicular abscess

e. Appendicular infiltrate

14. A patient complains of a rash and itching that becomes worse in the evening and at night and has been observed for 2 weeks already. Objectively, a papulovesicular rash with its elements arranged in pairs is observed on the lateral areas of the chest and abdomen and in the interdigital folds. What is the most likely diagnosis in this case?

a. Eczema

b. Toxicoderma

c. Neurodermatitis

d. Psoriasis

e. Scabies

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

a. Uterine rupture

b. Intranatal fetal death

c. Placental abruption

d. Placenta previa

e. Acute kidney failure

16. The patient complains of an inflammatory infiltration in the middle third of the left forearm. It is the first occurrence of this condition in the patient. In the middle third of the left forearm there is an inflammatory infiltration up to 3 cm in diameter that protrudes in a cone-like shape above the surface of the skin. The skin over the infiltration is hyperemic, edematous, its palpation is sharply painful. On the infiltration apex there is a small accumulation of pus with a black dot in the center. Body temperature is  $37.6^{\circ}\text{C}$  What disease is described?

a. Inflammatory infiltration of the forearm

b. Furuncle on the forearm

c. Carbuncle on the forearm

d. Phlegmon of the forearm

e. Erysipelas of the forearm

17. A 62-year-old man addressed a urologist with complaints of frequent urination at night (5-6 times per night), sensation of incomplete voiding of the urinary bladder, pain in the lower abdomen, slow urination. Anamnesis: the II degree essential hypertension (peak BP is 160/100 mm Hg). Current case: the II degree enlargement of the prostate gland, PSA is 2,2 ng/ml. Select the drug suitable for long-term therapy of the patient's combined pathology:

a. Amlodipine

b. Captopril

c. Propranolol

d. Indapamide

e. Doxazosin

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

a. Tocolytic therapy

b. Cesarean section

c. Waiting tactics

d. Vacuum extraction of the fetus

e. Drug induction of labor

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

a. Transient ischemic attack

b. Cerebral infarction

c. Hypertensive encephalopathy

d. Subdural hemorrhage

e. Intracerebral hemorrhage

20. A 62-year-old woman has an acute onset of the disease: high temperature of  $39.8^{\circ}\text{C}$ , chills, intense headache, and aching body. She complains of nausea and one episode of vomiting. 18 hours later, her right inguinal lymph nodes became enlarged and sharply painful. After another 6 hours, she developed edema of the right shin and skin hyperemia with irregular-shaped clear margins. What is the most likely diagnosis in this case?

a. Anthrax, edematous form

b. Bubonic plague

c. Bubonic tularemia

d. Erysipelas, erythematous form

e. Phlegmon of the right shin

21. A 46-year-old woman was awakened at 3 a.m. by a sharp pain in her right subcostal region that irradiated into her right shoulder. The woman is anxious, had two episodes of vomiting, notes fever and excessive sweating. Her temperature is  $39.0^{\circ}\text{C}$ . Objectively, her abdominal muscles are tense in the right subcostal region. Make the diagnosis:

a. Cholelithiasis

b. Unstable angina pectoris

c. Acute cholecystitis

d. Benign stricture of the common bile duct

e. Peptic ulcer disease

22. A 30-year-old woman came to the gynecological department. She complains of sharp pain in her lower abdomen and temperature of  $38.8^{\circ}\text{C}$ . She has a history of extramarital sexual activity and 2 artificial abortions. On gynecological examination the uterus is unchanged. The appendages are bilaterally enlarged and painful. Profuse purulent discharge is being produced from the vagina. What examination needs to be conducted to clarify the diagnosis?

a. Hysteroscopy

b. Curettage of the uterine cavity

c. Colposcopy

d. Laparoscopy

e. Bacteriological and bacterioscopic analysis

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

a. Mastodynia

b. Diffuse cystic mastopathy

c. Lactational mastitis

- d. Breast cyst
- e. Breast tumor

24. A 7-year-old boy fell ill 2 weeks ago, when he developed a runny nose. An otolaryngologist was consulted about sanguinopurulent discharge from the child's nose and maceration of his wings of the nose and upper lip. Rhinoscopy detects whitish-gray foci on the nasal septum. The oropharyngeal mucosa is without changes. Make the diagnosis:

- a. Maxillary sinusitis
- b. Adenovirus infection
- c. Allergic rhinitis

**d. Nasal diphtheria**

- e. Rhinovirus infection

25. A 23-year-old woman came to a doctor with complaints of headache, dizziness, chills, numbness and sharp weakness in her left arm - inability to hold objects. These complaints were increasing over the last year. Recently she had two episodes of loss of consciousness. During examination, the following is observed: no pulse on the left brachial and radial arteries; auscultation detects murmur over the left subclavian artery. Clinical blood test detects ESR of 45 mm/h. Angiography reveals occlusion of the left common carotid artery and partial stenosis (47%) of the left subclavian artery. Make the diagnosis.

**a. Takayasu arteritis**

- b. Microscopic polyangiitis
- c. Giant cell arteritis
- d. Polyarteritis nodosa
- e. Kawasaki arteritis

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

- a. Karyotyping

**b. Sweat chloride test**

- c. Bronchoscopy
- d. Chest X-ray
- e. Immunogram

27. 40% of the workers, who polish the art glass, using an abrasive disk, and have a long record of employment, are diagnosed with ulnar neuritis, 21% - with vegetative polyneuritis, and 12% - with vegetomyofascitis of the upper limbs. These pathologies are associated with the following harmful factor:

- a. Noise
- b. Electromagnetic field
- c. Dust

**d. Vibration**

- e. Microclimate

28. A 58-year-old patient was delivered to an admission room with complaints of pain in the thorax on the left. On clinical examination: aside from tachycardia (102/min.) no other changes. On ECG: pathologic wave Q in I, aVL, QS in V1, V2, V3 leads and 'domed' ST elevation with negative T. What diagnosis is most likely?

- a. Variant angina pectoris
- b. Exudative pericarditis
- c. Acute left ventricular posterior myocardial infarction
- d. Aortic dissection

**e. Acute left ventricular anterior myocardial infarction**

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

a. Uterine fibromyoma

**b. Cancer of the body of the uterus**

c. Ovarian cancer

d. Cervical cancer

e. Endometriosis

30. A 3-year-old child was brought to the hospital by the mother with complaints of leg edema, dyspnea, cough, and abdominal pain. Heart murmurs were detected in the child at the early age, but back then the parents declined further examination. After a case of acute viral respiratory infection one month ago, the mother noticed that the child had become inert and periodically fussy and started developing edema of the shins. The child's condition is severe. Respirations are 40/min. Foot and shin edema is observed. There are wet crackles in the lower posterior segments of the lungs. The left border of the relative cardiac dullness is located along the left anterior axillary line. Heart sounds are muffled and arrhythmic. The child's heart rate is 120/min. The liver is +5 cm. Diuresis is decreased. Name the pathogenesis of the edema in this child:

a. Protein loss in stool

b. Disturbed renal hemodynamics

**c. Reduced cardiac ejection fraction and venous congestion**

d. Reduced protein synthesis function of the liver

e. Increased vascular permeability

31. Cadmium levels in the river water downriver from the place, where a mining and metallurgical plant dumps its wastewater and from which the city is supplied with water, 8-10 times exceeds the maximum permissible concentration. What diseases, associated with this substance, will be observed among the city population?

a. Minamata disease

**b. Itai-Itai disease**

c. Yusho disease

d. Kashin-Beck disease

e. Prasad syndrome

32. A 15-year-old patient presents with delayed physical development and periodically develops icteric skin. Objectively, the spleen is 16x12x10 cm, cholecystolithiasis is observed in the patient, there is a skin ulcer on the left calf in its lower third. In the blood: erythrocytes -  $3.0 \cdot 10^{12}/L$ , Hb - 90 g/L, color index - 1.0, microspherocytosis, reticulocytosis. Total serum bilirubin - 56  $\mu\text{mol/L}$ , indirect bilirubin - 38  $\mu\text{mol/L}$ . What treatment method would be optimal in this case?

a. Portocaval anastomosis

b. Spleen transplant

**c. Splenectomy**

d. Omentohepatopexy

e. Omentosplenopexy

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

a. A case of death of a child after 28 days of life

b. A case of the death of a child during childbirth

c. A case of death of a child within the first 7 days of life

d. A case of death of a child within the first month of life

**e. A case of death of a child under one year of age**

34. 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. Determine TSH level in the blood

b. Positron emission tomography (PET)

c. Thyroid scintigraphy

**d. Fine-needle aspiration biopsy**

e. Case monitoring

35. A 38-year-old patient complains of a fever of  $39^{\circ}\text{C}$ , chills, profuse sweat, and dull lumbar pain that radiates into the suprapubic region. Objectively, muscle tension is observed in the lumbar region,



percussion test in the lumbar region provokes painful sensations on both sides. Complete blood count shows leukocytosis of  $12 \cdot 10^9/L$ . General urinalysis revealed the following: proteinuria - 0.7 g/L, leukocyturia - 15-20 in sight, bacteriuria of over 100,000 bacteria per 1 mL of urine. What is the most likely diagnosis in this case?

- a. Nephrolithiasis
- b. Acute glomerulonephritis

**c. Acute pyelonephritis**

- d. Renal tuberculosis
- e. Acute cystitis

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

**a. Valvular pneumothorax**

- b. Open pneumothorax
- c. Pneumoperitoneum
- d. Total hemothorax on the right
- e. Acute purulent pleurisy

37. A 38-year-old woman works in flax processing, she dries flax. She came to the hospital complaining of difficult breathing, constricting sensation in her chest, and cough attacks. These signs appear on the first day of her working week and gradually diminish on the following days. What respiratory disease is likely in this case?

**a. Byssinosis**

- b. Bronchial asthma
- c. Asthmatic bronchitis
- d. Allergic rhinopharyngitis
- e. Silicosis

38. Amortization costs for CT scan are included into its' price and annually amount to 10% of its original cost. When can the CT scan be replaced?

- a. In 15 years
- b. In 7 years

**c. In 10 years**

- d. In 20 years
- e. In 5 years

39. A 3-year-old child has been brought to a hospital with complaints of pain in the legs, fever, and 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. Infectious mononucleosis
- c. Acute rheumatic fever
- d. Thrombocytopenic purpura
- e. Hemorrhagic vasculitis (Henoch-Schonlein purpura)

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

- a. Foodborne toxicoinfection
- b. Staphylococcal toxicosis

**c. Nitrate-nitrite intoxication**

- d. Food poisoning caused by organochlorine pesticides
- e. Food poisoning caused by heavy metals

41. A 42-year-old woman complains of morning stiffness in the joints of her hands, a feeling of

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

- a. Sjogren's syndrome
- b. Systemic lupus erythematosus
- c. Rheumatoid arthritis

d. Scleroderma

- e. Rheumatism

42. During agricultural work in the field, a tractor driver received an open trauma of the hand. The tractor driver has never completed the full course of planned anti-tetanus immunization. What should he be given for urgent specific prevention of tetanus in this case?

a. 1.0 mL of tetanus anatoxin, 3000 IU of anti-tetanus serum

- b. 1.0 mL of tetanus anatoxin, 50000 IU of anti-tetanus serum

- c. 3000 IU of anti-tetanus serum

- d. 0.5 mL of tetanus anatoxin, 3000 IU of anti-tetanus serum

- e. No prevention is necessary

43. A 27-year-old man complains of pain in his leg joints, purulent discharge from the eyes, and painful burning sensations during urination. Disease onset was acute. He has a history of influenza. The patient smokes and drinks alcohol in excess. In his line of work he is often away on business trips. What is the most likely etiological factor of this disease?

- a. Adenovirus

- b. Candida

- c. Staphylococci

- d. Streptococci

e. Chlamydia

44. A 25-year-old woman complains of profuse, foul-smelling, foamy discharge from her vagina and burning and itching in the area of her genitals. She has been ill for a week and has no regular sexual partner. Vaginal examination detects foamy discharge and hyperemic vaginal mucosa that bleeds when touched. What is the most likely diagnosis in this case?

- a. Gonorrheal cervicitis

- b. Bacterial vaginosis

- c. Chlamydial cervicitis

- d. Vaginal candidomycosis

e. Trichomonas colpitis

45. A woman with systemic lupus erythematosus was receiving methylprednisolone in the daily dose of 10 mg as a part of her complex therapy for the past 6 months. What complication can develop as a result of long-term use of corticosteroids?

- a. Arterial hypotension

- b. Hypoglycemia

c. Osteoporosis

- d. Cachexia

- e. Hyponatremia

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

- a. Ventricular septal defect

b. Tetralogy of Fallot

- c. Primary bacterial endocarditis

- d. Atrial septal defect



e. Dilated cardiomyopathy

47. A child was born with the weight of 3250 g and the body length of 52 cm. At the age of 1.5 months, the child's actual body weight is sufficient (4350 g) and the psychophysical development corresponds with the child's age. The child is on breastfeeding. Periodical regurgitation is observed. What causes regurgitation in this child?

a. Aerophagia

b. Esophageal atresia

c. Pylorostenosis

d. Acute gastroenteritis

e. Pylorospasm

48. A 35-year-old woman complains of a pain in her right axillary region. She has been suffering from this condition for a week. Her body temperature is 38°C. In the right axillary region there are 2 formations, 2 cm in size each. The skin over the formations is dark red and thin. Palpation produces a yellow-white discharge from the fistular openings. What is the most likely diagnosis?

a. Furuncle

b. Carbuncle

c. Folliculitis

d. Lymphadenitis

e. Hydradenitis

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

a. Down syndrome

b. Klinefelter syndrome

c. Patau syndrome

d. Edwards syndrome

e. Turner syndrome

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

a. Erythrasma

b. Atopic dermatitis

c. Furunculosis

d. Scabies

e. Hidradenitis

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

a. Shingles

b. Eczema

c. Dermatitis herpetiformis (Dühring's disease)

d. Dermatitis

e. Herpes simplex

52. A 3-year-old girl was diagnosed with a bronchial asthma attack. Her saturation is 89%. She was taking no medicines. Choose the tactics for providing emergency care in this case.

a. Oxygen inhalation and glucocorticosteroid inhalations

b. Oxygen inhalation, intravenous administration of prednisolone

c. Oxygen inhalation, intravenous administration of Euphylline (Theophylline)

d. Oxygen inhalation, repeated inhalations of short-acting beta-2-agonists

e. Oxygen inhalation, intravenous administration of an antihistamine drug

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

- a. Tense hemarthrosis of the knee joint
- b. Subluxation of the patella, possibly habitual

**c. Damage to the internal meniscus**

- d. Damage to the medial collateral ligament
- e. Damage to the anterior cruciate ligament

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

- a. Pellet gunshot wound

**b. Animal bite wounds**

- c. Local effect of cold
- d. Multiple stab and incised wounds
- e. Blast injury

55. A patient complains of a fever of 39°C, chills, headache, difficulty sleeping, and poor appetite. Objectively, on the back surface of the neck, there is a large, purple-cyanotic, sharply painful, dense infiltrate. In the center of the infiltrate, there are several openings, through which thick yellow-green pus is being discharged. What is the most likely diagnosis in this case?

- a. Erysipelas

**b. Carbuncle**

- c. Hidradenitis
- d. Abscess
- e. Furuncle

56. A middle school teacher with 4-year-long record of work was issued a medical certificate for pregnancy and childbirth leave. What amount of pay will she receive for the duration of her leave in this case?

**a. 100% of average salary**

- b. 80% of average salary
- c. 60% of average salary
- d. 70% of average salary
- e. 50% of average salary

57. A 70-year-old man complains of weakness, dizziness, brief episodes of unconsciousness, and pain in the cardiac region. Objectively, his heart rate is 40/min., heart sounds are rhythmic, the first heart sound is muffled and significantly intensifies from time to time. Blood pressure is 180/90 mm Hg. What is the most likely cause of these hemodynamic disorders?

- a. Bradysystolic form of ciliary arrhythmia
- b. First-degree AV block

**c. Third-degree AV block**

- d. Complete block of the His left bundle branch
- e. Sinus bradycardia

58. A healthy newborn baby whose mother is HBsAg-positive (+) needs to receive hepatitis B vaccination in the maternity hospital. What would be the optimal vaccination tactics in this case?

- a. The child can be administered hepatitis B immunoglobulin after determining the HBsAg status
- b. Hepatitis B vaccine must be administered after 1 year
- c. Administer only hepatitis B immunoglobulin

**d. Administer the first dose of the vaccine within 24 hours after birth, administer the second and the third dose at the age of 2 and 6 months, respectively**

- e. The child is already infected and therefore does not need to be vaccinated

59. A man complains of unbearable cough with putrid-smelling chocolate-colored purulent sputum. The discharge of sputum reaches 600 mL per 24 hours. The patient's history states that the disease

onset was acute, with irregular fever and the body temperature reaching  $39^{\circ}\text{C}$ . X-ray shows a shadowed area with a cavity in its center that has irregular contours and a fluid level. What is the most likely diagnosis in this case?

- a. Lung abscess
- b. Cavernous tuberculosis
- c. Lung cancer with disintegration

**d. Pulmonary gangrene**

- e. Bronchiectasis

60. A man in a state of clinical death receives closed-chest cardiac massage and mouth-to-mouth artificial pulmonary ventilation. The doctor noticed that the air does not enter the patient's airways, and his head and torso are at the same level. Why is artificial pulmonary ventilation ineffective in this case?

- a. No gastric tube

**b. Swallowed tongue**

- c. Closed-chest cardiac massage
- d. The patient's mouth is too small
- e. The volume of inhaled air is too low

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

**a. Phasin**

- b. Muscaridine
- c. Muscarine
- d. Solanine
- e. Phallotoxin

62. A 40-year-old woman is taking Mercazolil (Thiamazole) in the dose of 50 mg/day to treat Graves' disease. Two weeks after the start of the treatment, she noted a fever of  $38.3^{\circ}\text{C}$ , a sore throat, and painful ulcers that appeared in her mouth. Complete blood count: erythrocytes -  $3.2 \cdot 10^{12}/\text{L}$ , Hb - 94 g/L, leukocytes -  $1.1 \cdot 10^9/\text{L}$ , ESR - 26 mm/hour. What is the most likely cause of the deterioration of the patient's condition?

- a. Acute respiratory viral infection
- b. Allergic reaction to Mercazolil (Thiamazole)
- c. Thyrotoxic crisis
- d. Aphthous stomatitis

**e. Development of agranulocytosis**

63. An 18-year-old young man was brought into to the hematology department with complaints of headache, general weakness, loss of appetite, fever of  $39^{\circ}\text{C}$ , and a swelling on his neck. Objectively,  $t^{\circ}\text{C}$  -  $38^{\circ}\text{C}$ , the skin and mucosa are markedly pale, the cervical lymph nodes on both sides are up to 1 cm in size and painless. The liver is +1 cm and painless, the spleen is +0.5 cm. In the blood: Hb - 98 g/L, erythrocytes -  $2.9 \cdot 10^{12}/\text{L}$ , leukocytes -  $32 \cdot 10^9/\text{L}$ , blast neutrophils - 0%, segmented neutrophils - 28%, monocytes - 2%, lymphocytes - 39%, blasts - 31%, reticulocytes - 31%, platelets -  $120 \cdot 10^9/\text{L}$ , ESR - 36 mm/hour. Specify the form of the patient's leukemia:

- a. Chronic myelogenous leukemia

**b. Acute lymphoblastic leukemia**

- c. Acute myeloblastic leukemia
- d. Chronic lymphocytic leukemia
- e. Undifferentiated leukemia

64. A 14-year-old girl has fainted during a meeting. The day before she complained of a headache. The skin is pale, the limbs are cold, shallow breathing, heart sounds are muffled; heart rate is 51/min.; BP is 90/50 mm Hg. The abdomen is soft. Meningeal symptoms are negative. Make the provisional diagnosis:

- a. Acute left ventricular failure
- b. Unconsciousness

**c. Collapse**

- d. Respiratory failure
- e. Acute right ventricular failure

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

- a. Eclampsia
- b. Moderate preeclampsia
- c. Severe preeclampsia
- d. Hypertensive crisis
- e. Epilepsy

66. A 25-year-old man was hospitalized with complaints of pain in his lower abdomen and right lumbar area that appeared one hour ago. Patient's general state is moderately severe. Body temperature -  $38.2^{\circ}\text{C}$ , heart rate - 102/min. The tongue is dry. The abdomen is painful on deep palpation in the right iliac area and in the Petit triangle. Aure-Rozanov and Gabay signs are positive. Make the provisional diagnosis:

- a. Cecal tumor
- b. Acute cholecystitis
- c. Acute appendicitis
- d. Right-sided renal colic
- e. Intestinal obstruction

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

- a. Femoral neck fracture
- b. Contusion of the hip joint
- c. Fracture of the upper third of the femur
- d. Greater trochanteric fracture
- e. Hip dislocation

68. Clinical statistical investigation was performed to determine efficiency of a new pharmacological preparation for patients with ischemic heart disease. What parametric test (coefficient) can be used to estimate reliability of the results?

- a. Kolmogorov-Smirnov test
- b. Sign test
- c. Wilcoxon signed-rank test
- d. Matching factor
- e. Student's t-distribution

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

- a. Rh incompatibility
- b. Biliary atresia
- c. Physiological jaundice
- d. ABO incompatibility
- e. Fetal hepatitis

70. A 37-year-old woman complains of constricting retrosternal pain that occurs every day at the same time in the morning. The pain occurs in the absence of provoking factors. Holter monitoring data show ST segment elevation in leads V1-V3 during a pain attack. Without pain syndrome, there are no pathological changes on the ECG. What is the most likely diagnosis in this case?

- a. Progressive angina pectoris
- b. Exertional angina pectoris, functional class III
- c. First episode of angina pectoris
- d. Unstable angina pectoris

**e. Prinzmetal angina pectoris**

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

a. Hyperimmunoglobulin E syndrome (emphiG)

**b. Hereditary hypogammaglobulinemia (Bruton's disease)**

c. Nezelof syndrome

d. Wiskott-Aldrich syndrome

e. DiGeorge syndrome

72. A 32-year-old patient has been hospitalized into the surgical department with clinical signs of hemorrhagic shock two hours after receiving a closed abdominal injury. During the surgery, a rupture of the spleen was diagnosed, the patient has up to 1.5 liters of liquid blood in the abdominal cavity. No damage to the hollow organs was detected. What type of transfusion must be provided in this case?

**a. Reinfusion**

b. Transfusion is not indicated

c. Indirect blood transfusion

d. Direct blood transfusion

e. Exchange blood transfusion

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

a. Esophagitis

b. Esophageal diverticulum

c. Benign esophageal tumor

d. Achalasia cardia

**e. Hiatal hernia**

74. A 42-year-old man complains of a lack of pain and thermal sensitivity in his left arm and in the left half of his chest, which causes him to receive burns that take a very long time to heal. According to the patient's medical history, the symptoms started without any apparent cause and have been increasing throughout the last 5 years. Neurological examination revealed a segmental dissociated sensory disturbance in C<sub>3</sub> - Th<sub>7</sub> segment on the left. What is the most likely diagnosis in this case?

a. Spinal ischemic stroke

b. Dermatomyositis

**c. Syringomyelia**

d. Amyotrophic lateral sclerosis

e. Left-sided total brachial plexitis

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

**a. Potentiation**

b. Combined action

c. Antagonism

d. Isolated action

e. Complex action

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

a. Complete obstetrical paralysis

b. Proximal obstetrical paralysis

- c. Osteomyelitis
- d. Hypoxic-ischemic encephalopathy

**e. Inferior distal obstetrical paralysis**

77. It is the 11th day after a woman has given birth and for the last 5 days she has been ill. She complains of chills. Her body temperature fluctuates between  $35.8^{\circ}\text{C}$  and  $39.9^{\circ}\text{C}$ . She cannot pump milk from her left breast. Objectively, her skin and mucosa are pale, her left mammary gland is significantly larger than the right one, the skin there is hyperemic, the upper and lower quadrants are dense, palpation detects a fluctuation and provokes sharp pain. The nipple is edematous and has a fissure with a purulent crust. The right mammary gland is normal. Make the provisional diagnosis:

- a. Postpartum period. Serous mastitis of the Left breast
- b. Postpartum period. Left breast cancer

**c. Postpartum period. Left breast abscess**

- d. Postpartum period. Sepsis
- e. Postpartum period. Physiological course

78. A 32-year-old man complains of pain in the chest on the left, dyspnea, temperature rise up to  $38.0^{\circ}\text{C}$ , slight cough. The disease onset was 2 weeks ago after overexposure to cold. He had suffered from bronchoadenitis in his childhood. The affected side lags during breathing; percussion reveals dull sound with oblique margin in the lower left lung, where breathing is absent. The right heart border is displaced outwards. Mantoux test with 2 TU resulted in a papule 16 mm in size. What diagnosis is most likely?

- a. Community-acquired pneumonia
- b. Thromboembolism of the pulmonary artery branches

**c. Tuberculous pleurisy**

- d. Central carcinoma of the left lung
- e. Congestion pneumonia

79. A 48-year-old woman complains of pain in the thoracic spine, sensitivity disorder in the lower body, disrupted motor function of the lower limbs, body temperature rise up to  $37.5^{\circ}\text{C}$ . She has been suffering from this condition for 3 years. Treatment by various specialists was ineffective. X-ray reveals destruction of adjacent surfaces of the VIII and IX vertebral bodies. In the right paravertebral area at the level of lesion there is an additional soft tissue shadow. What diagnosis is most likely?

- a. Spinal tumor
- b. Metastases into the spine
- c. Multiple sclerosis

**d. Tuberculous spondylitis of the thoracic spine**

- e. Osteochondrosis

80. A 20-year-old patient came to a doctor with complaints of a rash that appeared on the skin. Objectively, on the skin of the trunk, arms, and the back of the neck, there is a macular rash with light brown spots 1-3 cm in size that in some places merge together. The results of Balzer test are positive. What is the most likely diagnosis in this case?

- a. Microbial eczema
- b. Pityriasis rosea
- c. Secondary syphilis

**d. Tinea versicolor (Pityriasis versicolor)**

- e. Parapsoriasis

81. A 30-year-old woman complains of itching skin, predominantly in the evening and at night. The condition lasts for 2 weeks already. On the skin of the interdigital folds, mammary glands, abdomen, buttocks, and thighs there are numerous fine papular and papulovesicular rashes located in pairs, excoriations. There is no rash on the face and neck. Similar rash is observed in the husband of the patient. What is the most likely diagnosis?

- a. Eczema

**b. Scabies**

- c. Neurodermatitis
- d. Herpes
- e. Epidermophytosis

82. A 55-year-old woman complains of pain and popping sounds in her left knee joint, which occur



when she climbs the stairs. Occasionally during movements her joint becomes "locked". 5 years ago she suffered a trauma of her left knee. Complete blood count and biochemical blood analysis show normal results. X-ray shows marked osteosclerosis and osteophytes. The joint space is narrowed. Make the provisional diagnosis:

- a. Reactive arthritis
- b. Osteoarthritis**
- c. Psoriatic arthritis
- d. Rheumatoid arthritis
- e. Gouty arthritis

83. A victim has a II-III degree burn injury that covers 15 % of the body surface. On day 20 after the injury, the patient presents with a sharp increase in the body temperature, general weakness, and frequent shallow respirations. The blood pressure is 90/50 mm Hg, the pulse is 112/min. What complication can be suspected in this case?

- a. Pneumonia
- b. Acute intoxication
- c. Anaerobic infection
- d. Sepsis**
- e. Purulent bronchitis

84. A dweller of the northern Dnieper area, a fisherman, for the last several days has been complaining of a discomfort in his right subcostal region, periodical episodes of diarrhea, intermittent with constipations, frequent skin rashes. Abdominal ultrasound shows enlarged liver and pancreatic head. Make the provisional diagnosis:

- a. Opisthorchiasis**
- b. Trichinellosis
- c. Onchocerciasis
- d. Taeniasis
- e. Ornithosis

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

- a. Acute adnexitis
- b. Pelvioperitonitis
- c. Parametritis
- d. Lochiometra
- e. Acute metroendometritis**

86. When planning treatment of a patient, it was decided to use a medicine with evidence level A) What trials produce the evidence that allows to classify the medicine as level A?

- a. Data obtained from one randomized clinical trial
- b. Data obtained from many non-randomized trials
- c. Data obtained from several randomized clinical trials**
- d. Expert consensus
- e. Case-control studies

87. A 23-year-old man has accidentally swallowed brake fluid. After that he has been presenting with anuria for 5 days already; his creatinine levels elevated up to 0.569 mmol/L. What treatment tactics should be chosen in this case?

- a. Detoxication therapy
- b. Diuretics
- c. Hemodialysis**
- d. Plasmapheresis
- e. Antidotal therapy

88. After the extraction of the second molar, the patient's body temperature increased. He developed

pharyngeal pain on the left, infiltration, hyperemia of the lower part of the anterior palatine arch, and displacement of a tonsil towards the midline and upwards. Regional lymph nodes are painful to palpation. The otolaryngologist diagnosed the patient with paratonsillar abscess. What is the route of infection spread in this case?

a. Entry of a foreign body

**b. Odontogenic**

c. Lymphogenic

d. Tonsilogenic

e. Hematogenous

89. A 3-month-old child with signs of rickets presents with positive Chvostek, Trousseau, and Maslov signs. One day ago the parents witnessed a cyanotic attack in their child - the child broke into a cold sweat, the eyes bulged, and respiratory arrest occurred. One minute later the child drew in a loud breath and the child's condition normalized again. What is the cause of the described signs of the disease?

a. Increase of blood phosphorus levels

b. Increase of blood calcium levels

c. Metabolic acidosis

**d. Decrease of blood calcium levels**

e. Decrease of blood phosphorus levels

90. A 14-year-old girl complains of a maculopapular rash along her body, a fever of  $38.5^{\circ}\text{C}$ , and a sore throat. Objectively, she has enlarged cervical and submandibular lymph nodes and hyperemic oropharyngeal mucosa, her tongue and tonsils are coated with white plaque. Palpation revealed hepato- and splenomegaly. What is the most likely diagnosis in this case?

a. Viral hepatitis A

b. Scarlet fever

c. Enterovirus infection

**d. Infectious mononucleosis**

e. Chronic myeloid leukemia

91. A 28-year-old man, a teacher, after an 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. Neuropathy of the right ulnar nerve

b. Neuropathy of the right radial nerve

c. Parkinsonism

d. Cortical agraphia

**e. Writer's cramp**

92. What clinical symptoms are characteristic during the initial phase of acute radiation sickness?

**a. Nausea, vomiting that intensifies after drinking fluids, loss of appetite, headache, general weakness, drowsiness**

b. Nausea, vomiting, increased body temperature, spastic abdominal pain, deterioration of wellbeing

c. Normalization of temperature, improvement of wellbeing, increased appetite, cessation of bleeding

d. Hair loss, neurological symptoms that gradually even out, sharp deterioration of wellbeing, increased body temperature

e. Hemorrhages in the skin, mucosa, gastrointestinal tract, brain, heart, and lungs (hemorrhagic syndrome), loss of appetite, diarrhea (dyspeptic disorders)

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

**a. Crohn's disease**

b. Tuberculous ileotyphlitis

c. Pseudomembranous enterocolitis

d. Gluten enteropathy (celiac disease)

e. Whipple's disease

94. A newborn girl was born from the second pregnancy with a complicated delivery (weak labor activity, shoulder dystocia). The Apgar score is 6-8 points, the weight at birth is 4200 g. During examination, left-sided Erb-Duchenne palsy was diagnosed. At what level is the spinal cord damaged in this case, as is characteristic of this disorder?

a. C7-Th1

b. C5-C6

c. C3-C4

d. C1-C3

e. Th1-Th2

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

a. Deficiency of fats

b. Mineral imbalance

c. Vitamin imbalance

d. Deficiency of animal proteins

e. Deficiency of carbohydrates

96. A 58-year-old man complains of an inguinal tumor that increases during straining and coughing. Objectively, there is a pulsating tumor-like formation located below and laterally to the Poupart's ligament. The formation does not diminish during palpation. Make the diagnosis:

a. Ectopic testicle

b. Neurinoma of the femoral nerve

c. Inguinal hernia

d. Femoral hernia

e. Femoral aneurysm

97. A man has developed acute chills, headache, vomiting, and fever of  $38.5^{\circ}\text{C}$ . In the evening, nuchal rigidity and positive Kernig's sign appeared. Herpetic blisters are visible on the mucosa of his lips and nose. No focal neurological signs were detected. Make the diagnosis:

a. Brain abscess

b. Herpesviral encephalitis

c. Brain hemorrhage

d. Meningococcal meningitis

e. Subarachnoid hemorrhage

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

a. Acetylsalicylic acid

b. Rheopolyglucin (Dextran)

c. Low-molecular-weight heparin

d. Regular heparin

e. Phenylinum (Phenindione)

99. Examination of a newborn girl detects a hemorrhage on the child's head. The hemorrhage is limited to one cranial bone, does not pulsate, and is painless. What condition did the child develop?

a. Neonatal pemphigus

b. Hydrocephalus

c. Physiological birth-related edema

d. Intracranial birth injury

e. Cephalohematoma

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

a. Fractional analysis of gastric secretion

b. Abdominal CT scan

c. Comprehensive complete blood count

d. Fibrogastroscopy with biopsy of the gastric mucosa

e. Gastrointestinal X-ray

101. Two days ago a 28-year-old man injured the distal phalanx of his right index finger with a needle. He complains of a sharp throbbing pain and edema in the area of this phalanx and markedly impaired finger mobility. Objectively, his index finger is slightly bent, its distal phalanx is hyperemic and significantly enlarged. The probe clearly determines the point of maximum pain. The body temperature is  $36.9^{\circ}\text{C}$ . What treatment is necessary in this case?

a. Lancing and drainage of the abscess after applying general anesthesia

b. Resection of the distal phalanx of the finger

c. Application of semi-alcoholic compresses

d. Injections with antibiotics and novocaine (procaine) around the affected area

e. Lancing and drainage of the purulent process in the finger after applying Oberst-Lukashevich anesthesia

102. A woman has focal encephalitis in the anamnesis. Her spatial orientation is not disrupted. She has a sensation, as if "everything seems surreal: buildings are small, round or distorted; trees are upside down; people are very tall with thin limbs". Determine the psychopathologic syndrome:

a. Depersonalization

b. Derealization

c. Oneiric

d. Cenestopathic

e. Hallucinatory

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

a. Thermal procedures

b. Suprapubic bladder tap

c. Adrenergic blockers

d. Antispasmodics and analgesics

e. Diuretics

104. A man complains of dizziness and vomiting. Vomitus is dark-colored. The patient's history states that he often drinks alcohol. Esophagogastroduodenoscopy detected that the contents of the stomach resembled "coffee grounds", in the area of the cardia, there were four longitudinal fissures in the mucosa, from which a small amount of blood was leaking. What is the most likely diagnosis in this case?

a. Mallory-Weiss syndrome

b. Erosive gastritis

c. Gastric cardia ulcer

d. Bleeding from gastric varices

e. Zollinger-Ellison syndrome

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

a. Pulse oximetry

b. Spirometry

c. Pneumotachometry

d. Assessment of accessory respiratory muscles involvement

e. Chest X-ray

106. A 59-year-old woman was brought into the rheumatology unit. Extremely severe case of scleroderma is suspected. Objectively she presents with malnourishment, "mask-like" face, and acro-osteolysis. Blood: erythrocytes -  $2.2 \cdot 10^9/\text{L}$ , erythrocyte sedimentation rate - 40 mm/hour. Urine: elevated levels of free oxyproline. Name one of the most likely pathogenetic links in this case:

- a. Formation of antibodies to transversely striated muscles
- b. Formation of antibodies to native DNA

**c. Formation of antibodies to collagen**

- d. Formation of antibodies to blood corpuscles
- e. Formation of antibodies to vessel wall

107. A 32-year-old woman addressed a dermatologist with complaints of slightly itching rashes in the mouth angles. She has been suffering from this condition for 3 days. Objectively: there are isolated small phlyctenas and superficial erosions covered in honey-yellow scabs against the background of slight hyperemia. Make the diagnosis:

- a. Eczema
- b. Dermatitis
- c. Herpes
- d. Atopic cheilitis

**e. Streptoderma**

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

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

109. A 12-year-old girl has developed a panaritium (whitlow) on the fourth finger of her left hand. In this case, a reaction is most likely to be detected in a certain group of lymph nodes. Name this group of lymph nodes.

- a. Axillary
- b. Supraclavicular

**c. Cubital**

- d. Thoracic
- e. Subclavian

110. A 30-year-old woman suffers from polycystic renal disease. She has been admitted with signs of fatigue, thirst and nocturia. Diuresis is up to 1800 ml per day. BP is 200/100 mm Hg. Blood test: erythrocytes -  $1,8 \cdot 10^9/l$ , Hb- 68 g/l. Urine analysis: specific gravity - 1005, leukocytes - 50-60, erythrocytes - 3-5 in the vision field, creatinine - 0,82 mmol/l, potassium - 6,5 mmol/l, glomerular filtration rate - 10 ml/min. What tactics would be leading in the patient's treatment?

**a. Hemodialysis**

- b. Sorbent agents
- c. Blood transfusion
- d. Hypotensive therapy
- e. Antibacterial therapy

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

- a. Encephalitis
- b. Cerebral infarction

**c. Subarachnoid hemorrhage**

- d. Meningitis
- e. Subdural hematoma

112. A 45-year-old woman complains of general weakness, dyspnea, and dizziness. Within one year her hair became gray, her nails started peeling, and she developed gustatory disorders. For the last 5 years she has been registered for regular check-ups with a gynecologist for uterine fibromyoma. Her blood test shows the following: erythrocytes -  $3,0 \cdot 10^{12}/L$ , Hb - 76 g/L, color index - 0,7, reticulocytes - 0,7%, platelets -  $160 \cdot 10^9/L$ , leukocytes -  $5,0 \cdot 10^9/L$ , eosinophils - 2%, band neutrophils - 3%, segmented neutrophils - 63%, lymphocytes - 28%, monocytes - 4%, aniso- and microcytosis, ESR - 30

mm/hour. What type of anemia can be suspected in this case?

a. B<sub>12</sub>-deficiency anemia

b. Iron-deficiency anemia

c. Minkowski-Chauffard syndrome

d. Autoimmune hemolytic anemia

e. Hypoplastic anemia

113. A 22-year-old woman with primary infertility complains of irregular menstruations and of colostrum being produced from her mammary glands. Ultrasound of the lesser pelvis shows hypoplastic uterus and ovaries without peculiarities. MRI of the sella turcica detects no abnormalities. The patient's prolactin is 3 times higher the normal level. The follicle-stimulating and luteinizing hormones are below the normal levels. The levels of cortisol and testosterone are within the normal range. What medicines should be chosen for the treatment of this pathology?

a. Progestagens

b. Glucocorticoids

c. Combined oral contraceptives

d. Estrogens

e. Dopamine agonists

114. A patient has been diagnosed with right-sided pneumothorax and prescribed urgent drainage of the pleural cavity. What site should be used for the pleural tap in this case?

a. The site of the largest percussion dullness

b. The sixth intercostal space, on the posterior axillary line

c. The seventh intercostal space, on the scapular line

d. The second intercostal space, on the midclavicular line

e. The projection of the pleural sinus

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

a. Scarlet fever

b. Diphtheria

c. Infectious mononucleosis

d. Measles

e. Rubella

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

a. Measles

b. Scarlet fever

c. Viral hepatitis A

d. Pseudotuberculosis

e. Infectious mononucleosis

117. A child is 1 year old. After solid food was introduced into the diet, within the last several months the child developed loss of appetite, diarrhea with large amount of feces, and occasional vomiting. Body temperature remains normal. Body weight is 7 kg. The child is very pale, has leg edemas and extremely distended abdomen. Feces analysis detects high levels of fatty acids and soaps. Diagnosis of celiac disease was made and gluten-free diet was prescribed. What should be excluded from the diet in this case?

a. Easily digestible carbohydrates

b. Animal protein

c. Milk and dairy products

d. Fruits



**e. Cereals - wheat, oats**

118. A woman addressed a doctor with complaints of increased body temperature up to  $37,8^{\circ}\text{C}$  and moderately sore throat for the last 3 days. Objectively: mandibular lymph nodes are enlarged up to 3 cm. Palatine tonsils are hypertrophied, covered with grey coating that spreads to the uvula and anterior pillars of the fauces. What diagnosis is most likely?

a. Oropharyngeal candidiasis

**b. Oropharyngeal diphtheria**

c. Infectious mononucleosis

d. Pseudomembranous (Vincent's) tonsillitis

e. Agranulocytosis

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

a. Cut into small pieces and boiled

b. Deep frozen

c. Used in public catering networks

d. Used to make sausages

**e. Technically utilized**

120. A 38-year-old woman after physical overexertion suddenly developed palpitations, dyspnea, and a dull pain in the cardiac area. For 10 years she has been registered for regular check-ups due to rheumatism and mitral valve disease with non-disturbed blood circulation. Objectively her pulse is 96/min., of unequal strength. Blood pressure is 110/70 mm Hg, heart rate is 120/min. ECG registers small unevenly-sized waves in place of P-waves, R-R intervals are of unequal length. What is the most likely diagnosis?

a. Paroxysmal supraventricular tachycardia

b. Atrial flutter

c. Paroxysmal ventricular tachycardia

d. Respiratory arrhythmia

**e. Atrial fibrillation**

121. A 23-year-old woman with a history of taking injection drugs was registered at a maternity clinic due to her pregnancy (14 weeks of gestation). Diagnosis: HIV infection, second clinical stage. The patient's general condition is satisfactory, she has no complaints. The results of additional examinations are as follows: moderate anemia and leukopenia, CD4 lymphocyte count - 650 cells/mcL, viral load - 2000 copies/mL. Is antiretroviral therapy indicated for this patient?

**a. Mandatory prescription of antiretroviral therapy**

b. Antiretroviral therapy cannot be prescribed to pregnant women

c. Antiretroviral therapy can be prescribed only if CD4 lymphocyte count is less than 350 cells/mcL

d. The start of antiretroviral therapy can be delayed because of the pregnancy

e. Antiretroviral therapy is prescribed at the third clinical stage of HIV infection

122. A young man has made an appointment with the dermatologist. He complains of a painful facial rash in the beard and mustache area. This condition has been persisting for several weeks already. After shaving, the patient's condition aggravates. The diagnosis of sycosis is made. What primary morphological elements can be observed in the rash in this case?

a. Pustules, bumps

**b. Pustules, papulae**

c. Phlyctenae, maculae

d. Maculae, nodes

e. Nodes, nodules

123. A 32-year-old primipara woman developed intense contractions that last 55-60 seconds with an interval of 1-2 minutes between them. Objectively, the disengagement of the fetal head begins. The perineum protrudes excessively and has the height of 4 cm. The skin of the perineum is pale and tense. After a contraction stopped, a thin stream of blood appeared from the genital opening. Specify the further tactics of managing the delivery.

**a. Episiotomy**

b. Application of obstetrical forceps

c. Waiting tactics

- d. Caesarean section
- e. Vacuum extraction of the fetus

124. A 36-year-old patient complains of suffocation attacks with predominantly problematic exhalation. The attacks occur up to 2-3 times a day and can be relieved by inhalation of beta<sub>2</sub>-adrenomimetics. This condition lasts for 10 years already. Objectively, the chest is expanded, percussion detects a bantbox resonance over the lungs, auscultation detects harsh respiration with prolonged exhalation. Laboratory analysis of sputum detects numerous eosinophils, Charcot-Leyden crystals, and Curschmann spirals. What is the provisional diagnosis in this case?

- a. Chronic obstructive bronchitis
- b. Carcinoid syndrome
- c. Cardiac asthma
- d. Spontaneous pneumothorax

**e. Bronchial asthma**

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

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

126. When examining blood coagulation system of a man before a surgery, he was found to have a deficiency of factor VIII - antihemophilic globulin A) What disease is it?

**a. Hemophilia A**

- b. Hemophilia C
- c. Hemorrhagic vasculitis
- d. Hemorrhagic angiomatosis
- e. Hemophilia B

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

- a. Lymphadenitis
- b. Hidradenitis

**c. Bursitis**

- d. Erysipelas
- e. Abscess

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

**a. Anaerobic clostridial**

- b. Anaerobic non-clostridial
- c. Blue pus bacillus
- d. Staphylococci
- e. Streptococci

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

- a. Minor caesarean section

**b. Termination of pregnancy**

- c. Administration of antispasmodics
- d. Administration of uterotonics
- e. Prolongation of pregnancy

130. A 27-year-old man complains of dry cough, dyspnea during the slightest exertion, chest pain, and high temperature of  $37.3^{\circ}\text{C}$  that persists for the last 3 weeks. He has a past history of drug abuse. His respiration is rough, without crackles. He has tachycardia of 120/min. X-ray shows interstitial changes on the both sides of his lungs. Bronchoscopy detects *Pneumocystis carinii* in the lavage fluid. What medicine will be the most effective for the treatment of this patient?

**a. Biseptol (co-trimoxazole), clindamycin**

- b. Erythromycin, rifampicin
- c. Ampicillin, nifedipine (nifedipine)
- d. Cefamezin (cefazolin), nitrofurantoin
- e. Interferon, rimantadine

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

- a. Acute necrotizing pancreatitis
- b. Acute nonspecific colitis

**c. Acute intestinal obstruction**

- d. Acute destructive cholecystitis
- e. Acute erosive gastritis

132. A 20-year-old man was brought to a clinic on the 7th day of illness with complaints of icteric skin and sclerae, dark urine, one episode of vomiting, low appetite, and fever of  $38^{\circ}\text{C}$  throughout the last 2 days. Three weeks ago he went fishing with friends, during which they all shared the same tableware. Objectively, he is inert,  $t^{\circ} - 36.8^{\circ}\text{C}$ , his skin and sclerae are icteric, the liver protrudes from under the edge of the costal arch by 3 cm and is tender on palpation; the spleen cannot be palpated. Patient's urine is dark, his feces are partially acholic. Make the diagnosis:

**a. Viral hepatitis A**

- b. Intestinal yersiniosis
- c. Infectious mononucleosis
- d. Hemolytic anemia
- e. Leptospirosis

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

- a. 2 points
- b. 4 points
- c. 3 points
- d. 0 points

**e. 1 point**

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

- a. Hebephrenic syndrome
- b. Delirium syndrome
- c. Manic syndrome

**d. Twilight state**

e. Paranoid syndrome

135. Examination of the placenta that was just delivered detected a defect 2x3 cm in size. There is no bleeding. What would be the further tactics of the patient's management?

**a. Manual revision of the uterine cavity**

b. Extirpation of the uterus

c. Prescription of uterotonics

d. Instrumental revision of the uterine cavity

e. External uterine massage

136. A newborn has a round red formation in the suprapubic region. Examination shows that urine is being discharged in pulses from the two orifices located in the lower part of this formation. Name this developmental anomaly:

a. Urachal cyst

b. Bladder diverticulum

c. Vesico-umbilical fistula

**d. Bladder exstrophy**

e. Bladder agenesis

137. Examination of the corpse of a man, who died by hanging, reveals that the spots of livor mortis disappear when pressed and reappear 50 seconds later. The rigor mortis is moderate and observed only in the masticatory muscles and muscles of neck and fingers. The body temperature is 31.0°C. What is the time of death in this case?

a. 1-2 hours

b. 8-10 hours

c. 16-24 hours

**d. 6-7 hours**

e. 10-18 hours

138. A 32-year-old patient complains of pain in the left leg, observed for a year, with intermittent limping after walking 50-100 meters and periodical nocturnal pain. Objectively, the left leg is pale and cold. Arterial pulsation is absent in the left lower leg. What is the most likely diagnosis in this case?

a. Raynaud syndrome

b. Leriche syndrome

**c. Obliterating endarteritis**

d. Aortic embolism

e. Aortic thrombosis

139. A man suddenly developed a sharp pain in the right side of his chest. Dyspnea has rapidly progressed. Objectively, the patient has marked acrocyanosis and is in a severe condition. Subcutaneous emphysema is observed in the area of the patient's neck and upper chest. Over the right lung a borborygmus resonance can be heard, respiration is absent there. The heart borders are displaced to the left. The patient's heart rate is 110/min., blood pressure - 100/60 mm Hg. What is the most likely disease in this case?

**a. Spontaneous pneumothorax**

b. Exudative pleurisy

c. Lung infarction

d. Community-acquired pneumonia

e. Myocardial infarction

140. A patient complains of pain, photophobia, lacrimation, and impaired vision in the right eye. The visual acuity of the right eye is 0.5, cannot be corrected, the visual acuity of the left eye is 1.0. Objectively, the palpebral fissure is narrowed in the right eye, pericorneal injection of the eyeball is observed. Precipitates were detected on the posterior corneal surface. The pupil is narrowed, the response to light is slowed. Floating opacities are observed in the anterior part of the vitreous body. The fundus is normal. What is the most likely diagnosis in this case?

**a. Acute iridocyclitis**

b. Acute keratitis

c. Acute glaucoma attack

d. Posterior uveitis

e. Bacterial conjunctivitis

141. A man, who was diagnosed with scabies and underwent a specific treatment, has made a follow-up appointment with a doctor. What measures must he take to prevent a recurrence of scabies?

- a. Correction of the immune status
- b. Elimination of food allergens
- c. Footwear disinfection
- d. Correction of the gastrointestinal tract function

e. Laundry disinfection

142. A 59-year-old man complains of pain in his left eye and left side of his head, significant vision impairment of the left eye, nausea, and vomiting. Visual acuity of the right eye is 1.0. Visual acuity of the left eye is 0.03, attempts at correction bring no improvement. Right eye intraocular pressure - 21 mm Hg, left eye intraocular pressure - 65 mm Hg. Congestive injection is observed on the sclera of the left eye. The cornea is thick and swollen. The anterior chamber is shallow, moist, and clear. The pupil is dilated and unresponsive to the light, the fundus of the eye is not visible. What is the most likely diagnosis?

- a. Endophthalmitis of the left eye
- b. Acute attack of glaucoma of the left eye
- c. Acute iridocyclitis of the left eye
- d. Stage II intraocular tumor of the left eye
- e. Panophthalmitis of the left eye

143. A 36-year-old man has been suffering from rheumatoid arthritis for 8 years. Two months ago he developed swelling of the left knee joint that was resistant to treatment. Objectively, he has synovitis of the left knee joint. A puncture of the joint was performed, obtaining 50 mL of exudate. What cells will be detected during the examination of the puncture material obtained from the joint?

a. LE cells

b. Ragocytes

- c. Reed-Sternberg cells
- d. Eosinophils
- e. Erythrocytes

144. A 28-year-old woman complains of a feeling of unreality, of her own body being changed somehow. When she stands in front of a mirror, she recognizes herself, but her hands, legs, and face seem alien like they do not belong to her. What is the most likely psychopathological disorder in the patient?

- a. Illusions
- b. Cenesthopathy
- c. Hallucinations
- d. Derealization

e. Depersonalization

145. A 27-year-old patient has constant vomiting and diarrhea that resembles a "rice broth". The day before, the patient was drinking unknown alcoholic beverages and eating mushrooms. Three days ago he returned from India, where he was on a tourist trip. Objectively, his temperature is  $35.6^{\circ}\text{C}$ , his blood pressure cannot be determined. The skin is dry, pale, and does not smooth out when pinched into a fold. The pulse is thready and the heart sounds are weakened. What is the most likely diagnosis in this case?

a. Cholera

- b. Rotaviral gastroenteritis
- c. Mushroom poisoning
- d. Salmonellosis
- e. Poisoning with surrogate alcohols

146. A 65-year-old woman complains of general weakness, increased fatigability, and numbness and tingling in her hands observed for the past 4 months. Objectively, the following is observed: body temperature -  $36.6^{\circ}\text{C}$ , respiratory rate - 19/min., pulse - 96/min., blood pressure - 115/70 mm Hg. The skin and visible mucosa are pale and slightly icteric. Neurologically, a symmetric decrease in sensitivity was detected in both upper limbs. Complete blood count: erythrocytes -  $2.4 \cdot 10^{12}/\text{L}$ ,

hemoglobin - 105 g/L, leukocytes -  $2.5 \cdot 10^9/L$ , ESR - 28 mm/hour, platelets -  $180 \cdot 10^9/L$ . Microscopy of a smear revealed megalocytosis, erythrocyte hyperchromia, neutrophil hypersegmentation, anisocytosis, and poikilocytosis. What is the most likely diagnosis in this case?

- a. Sideroachrestic anemia
- b. B<sub>12</sub> and folate deficiency anemia**

- c. Anemia of chronic disease
- d. Iron deficiency anemia
- e. Autoimmune hemolytic anemia

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

- a. Cardiogenic shock
- b. Spontaneous pneumothorax
- c. Pulmonary thromboembolism**

- d. Pulmonary edema
- e. Pulmonary infarction

148. A 28-year-old man after lifting a weight felt an intense lumbar pain that irradiated to the right leg. He made an appointment with a doctor. After examination, the doctor diagnosed him with acute discogenic lumbosacral radiculitis. What additional examination is necessary to confirm this diagnosis?

- a. Urinalysis
- b. Kidney X-ray
- c. Electromyography of the leg muscles
- d. Lumbar puncture

- e. Lumbar MRI**

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

- a. Oxacillin
- b. Ampicillin

- c. Bicillin-5**

- d. Erythromycin
- e. Bicillin-1

150. During examination a 4-month-old child with meningococcemia 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. Toxic shock syndrome**

- b. Exicosis
- c. Acute renal failure
- d. Encephalic syndrome
- e. Neurotoxicosis

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

- a. Prerenal acute kidney injury**

- b. Acute tubulointerstitial nephritis
- c. Congested kidney
- d. Acute renal failure
- e. Rapidly progressive glomerulonephritis

152. A 14-year-old girl is being examined by a pediatrician. Objectively, she has a tall stature, asthenic body type, striae on the skin of the abdomen, blue sclera. She was diagnosed with a scoliotic



posture and chest deformity. She has hypermobile joints, her fingers and arms are long. Cardiac ultrasound visualizes a mitral valve prolapse. What is the most likely cause of her tall stature?

- a. Klinefelter syndrome
- b. Ehlers-Danlos syndrome
- c. Noonan syndrome
- d. Williams syndrome

**e. Marfan syndrome**

153. A 19-year-old young man has been hospitalized into the hematology department with complaints of pain in his right shoulder joint that occurred after the joint was bruised. It is known from the patient's history that such clinical presentations were observed repeatedly since his early childhood. Objectively, the joint is enlarged in volume and sharply painful to palpation. Blood test: erythrocytes -  $3.7 \cdot 10^{12}/L$ , Hb - 110 g/L, platelets -  $175 \cdot 10^9/L$ , leukocytes -  $6.9 \cdot 10^9/L$ , ESR - 25 mm/hour, prothrombin index - 90%, recalcification time - 280 min., blood coagulation time: beginning - 10 min., end - 38 min., activated partial thromboplastin time - 90 min., fibrinogen - 3.5 g/L. What is the most likely diagnosis in this case?

**a. Hemophilia**

- b. Autoimmune coagulopathy
- c. Hemorrhagic vasculitis
- d. Thrombocytopathy
- e. Autoimmune thrombocytopenia

154. A district doctor has diagnosed one of his patients with dysentery. What accounting document reflects this type of morbidity?

**a. Urgent report**

- b. Statistical report
- c. Certificate of temporary disability
- d. Report on a major non-epidemic disease
- e. Control card of a patient registered for regular check-ups

155. A multipara woman developed vaginal bleeding with the onset of full-term delivery. Internal obstetric examination detected the following: the cervix is smoothed out, the opening is 6 cm, 1/3 of the internal os is obstructed by a spongy tissue. The amniotic sac is palpable in the rest of this area. The labor is active. Specify the further tactics of the delivery management in this case.

**a. Stopping the active labor**

**b. Amniotomy**

- c. Caesarean section
- d. Stimulation of the labor
- e. Hemostatic therapy

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

- a. Lymphatic-hypoplastic diathesis
- b. Allergic (atopic) diathesis
- c. Staphyloiderma

**d. Exudative-catarrhal diathesis**

**e. Neuro-arthritic diathesis**

157. A child was born at 40 weeks of gestation with the weight of 3700 g. The child's Apgar score is 7/9. The baby was put to breast immediately after birth and suckled actively. On the 3rd day of life the child's weight decreased to 3600 g. What transitory condition is observed in this child?

**a. Physiological weight loss**

- b. Physiological jaundice
- c. Transient dysbiosis
- d. Uric acid infarction
- e. Toxic erythema

158. A quarry produces granite, which is then broken into pieces with explosives and manual pneumatic hammers. When breaking granite rocks and drilling blast holes for the explosives, the workers are exposed to local vibration of medium and high frequency. Vibration measurement revealed that it exceeds the maximum permissible level. What specific changes can develop in the workers as the result of prolonged exposure to such working conditions?

- a. Hand dermatitis
- b. Sensorineural hearing loss
- c. Psychasthenia
- d. Somatoform autonomic dysfunction
- e. Sensory polyneuropathy with angiospastic syndrome**

159. A parturient woman is 23 years old. Internal obstetric examination shows the uterine cervix to be completely open. Fetal bladder is absent. Cephalic presentation is observed in the plane of the small pelvic outlet. Sagittal suture is at the longitudinal section of the small pelvic outlet, small fontanel is situated closer to the uterus. What cephalic position will the newborn have during birth in this case?

- a. Minor oblique lie**
- b. Transverse lie
- c. Medium oblique lie
- d. Major oblique lie
- e. Longitudinal lie

160. A 10-year-old child, living in a large industrial city, presents with encephalopathy, polyneuritis, disturbed mental development, and reduced learning ability. In the blood: reticulocytosis, basophilic stippling of the erythrocytes. What poisoning can be suspected?

- a. Lead**
- b. Iron
- c. Mercury
- d. Copper
- e. Zinc

161. A 10-year-old boy complains of shortness of breath during walking, a fever of  $38^{\circ}\text{C}$ , pain and swelling in both knee joints. Two weeks ago, he had a case of tonsillitis. Objectively, the following is observed: swelling, hyperemia, reduced mobility of the knee joints, expansion of the borders of the heart to the left, tachycardia, muffled heart sounds, systolic murmur at the apex. What is the most likely diagnosis in this case?

- a. Non-rheumatic carditis
- b. Infectious-allergic arthritis
- c. Acute rheumatic fever**
- d. Systemic lupus erythematosus
- e. Still's disease

162. The region at the Carpathian foothills is characterized by constant high atmospheric humidity (over 80%). In the cold season, while the air temperature is moderately low, the population of this region feels extreme cold. What type of heat transfer increases in such conditions?

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

163. A 17-year-old girl complains of a pain in her knee and ankle joints and body temperature up to  $39^{\circ}\text{C}$  2 weeks ago she had a case of acute tonsillitis. Objectively, her joints are swollen, sharply painful, and their mobility is reduced. On the skin of her trunk and limbs there are barely visible circle-shaped pale pink spots. Heart rate is 95/min., blood pressure is 90/60 mm Hg, heart sounds are weakened, there is a soft systolic noise over the apex. Make the provisional diagnosis:

- a. Acute rheumatic fever**
- b. Reactive arthritis
- c. Erythema nodosum
- d. Systemic scleroderma
- e. Rheumatoid arthritis

164. Such parameters as blood pressure and the patient's age were studied in 200 patients with essential hypertension. What statistical value should be used to measure how strong the connection is between these two parameters?

- a. Correlation coefficient
- b. Student's coefficient
- c. Representativeness error
- d. Sigma deviation
- e. Coefficient of variation

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

- a. Mediastinitis
- b. Lung abscess
- c. Empyema of the pleural cavity

d. Spontaneous pneumothorax

- e. Myocardial infarction

166. A 48-year-old man came to a doctor with complaints of vomiting that brings no relief and a burning pain in his left subcostal region that irradiates to the left lumbar region. These signs appeared after a meal. The Ortner's and Mayo-Robson's signs are positive. In the blood: leukocytosis and increased ESR. In the urine: elevated diastase levels. Make the diagnosis:

- a. Gastric ulcer perforation
- b. Chronic gastritis in the exacerbation stage
- c. Renal colic

d. Chronic pancreatitis in the exacerbation stage

- e. Chronic cholecystitis in the exacerbation stage

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

- a. *Escherichia coli*
- b. *Shigella sonnei*
- c. *Salmonella typhi*
- d. *V. cholerae*

e. *Salmonella enteritidis*

168. A person with peptic ulcer disease of the stomach, who undergoes no treatment and periodically has pain in the epigastrium and sour eructation, suddenly developed general weakness, palpitations, dizziness, and "coffee grounds" vomiting, later melena appeared as well. Objectively, the patient has pain in the epigastrium and positive Mendel sign. Blood test revealed the following: hemoglobin - 82 g/L, leukocytes -  $7.5 \cdot 10^9/L$ , ESR - 22 mm/hour. What complication has developed in the patient?

- a. Pleural empyema
- b. Intestinal obstruction
- c. Ulcer malignization

d. Gastrointestinal bleeding

- e. Portal hypertension

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

- a. De-nol (bismuth subcitrate) + cimetidine

b. Clarithromycin + omeprazole

- c. De-nol (bismuth subcitrate) + trichopol (metronidazole)
- d. Omeprazole + oxacillin
- e. Quamatel (famotidine) + amoxicillin

170. A 24-year-old man has developed increasing headaches, vertigo, diplopia, paresis of the facial muscles on the right, choking during swallowing. The signs appeared on the 5th day of respiratory disorder. He was diagnosed with acute viral encephalitis. Determine the main direction of emergency therapy:

- a. Neohaemodes
- b. Ceftriaxone
- c. Lasix (Furosemide)
- d. Glucocorticoids

**e. Zovirax (Aciclovir)**

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

- a. Acute cholecystitis
- b. Perforated duodenal ulcer
- c. Food poisoning
- d. Acute pancreatitis

**e. Intestinal obstruction**

172. A 38-year-old man has been drinking alcohol excessively for the last 3 years. Three days after a drinking bout, he developed anxiety and fear. He started to see spiders and worms around him, hear accusatory voices, and behave aggressively. He is oriented in himself, but disoriented in time and space. What is the most likely diagnosis in this case?

- a. Pathological intoxication

**b. Delirium tremens**

- c. Alcoholic paranoid
- d. Alcoholic encephalopathy
- e. Alcoholic hallucinosis

173. A patient has developed a "raccoon eyes" sign ("spectacle hematoma") - blood has spread under the skin of the eyelids and conjunctiva of both eyes. Isolated streak-like hemorrhages are visible on the fundus. What injury can cause such changes?

- a. Eyeball contusion
- b. Cerebral contusion
- c. Subconjunctival scleral rupture
- d. Concussion

**e. Basilar skull fracture**

174. A 78-year-old patient with chronic venous insufficiency suddenly developed shortness of breath, stabbing pain in the chest, dry cough, palpitations, body temperature of  $37.1^{\circ}\text{C}$ , and a brief episode of unconsciousness. Examination revealed the following: severe condition, diffuse cyanosis, dilation of the jugular veins, respiratory rate - 35/min., vesicular breathing, the second heart sound is accentuated over the pulmonary artery, heart rate - 130/min., BP - 80/60 mm Hg, reduced saturation. D-dimer levels are high. ECG shows sinus tachycardia, P pulmonale, and negative T wave in leads III and V1-V2. Chest X-ray shows high position of the dome of the diaphragm on the left. What medical condition did the patient most likely develop in this case?

- a. Acute respiratory failure
- b. Acute coronary syndrome
- c. Bronchial asthma attack

**d. Pulmonary embolism**

- e. Pneumothorax

175. A 19-year-old young man after a treatment for bilateral pneumonia developed thirst, high appetite, weight loss, and dry mouth. The signs continue to intensify. Examination shows fasting glycemia of 19.7 mmol/L, glucosuria of 2.8 g/L, and signs of acetonuria. What treatment should he be prescribed?

- a. Glucose solution

**b. Insulin**

c. Metformin

d. Physiological saline

e. Biguanides

176. A child has suddenly developed a respiratory arrest, cyanotic skin, and pinpoint pupils; there is no pulse on the great blood vessels. What measures must be taken first in this case?

**a. Artificial pulmonary ventilation, closed-chest cardiac massage**

b. Gastric lavage

c. Intravenous injection of euphyllin (aminophylline)

d. Intracardiac injection of adrenaline

e. Oxygen therapy

177. A 27-year-old woman has been treated in a surgical department for pleural empyema for 6 months. Multiple paracenteses of the pleural cavity were performed along with antibacterial treatment. The patient's condition is slowly aggravating; attempts to fully stretch the lung were unsuccessful. Choose the tactics:

**a. Decortication of the lung**

b. Pneumonectomy

c. Set constant active suction drain

d. Change antibiotics

e. Include hyperbaric oxygenation in the treatment

178. A 63-year-old woman for the last 5 weeks presents with progressing painless jaundice, skin itching, weight loss of 10 kg, and acholia. Positive Courvoisier sign was detected during palpation. What is the most likely diagnosis in this case?

a. Malaria

b. Viral hepatitis

c. Gallbladder cancer

d. Liver cancer

**e. Pancreatic cancer**

179. A woman with atopic bronchial asthma was found to have one allergen to dog hair +++. Carpets were removed from the apartment, the apartment was renovated, and air conditioner was installed. However, recurrent asphyxia attacks still occur every night, despite the patient undergoing pathogenetic therapy. What long-term treatment tactics can help this patient to decrease her sensitivity to the allergen?

a. Continuation of prior treatment

**b. Specific hyposensitization**

c. Buteyko breathing technique

d. Referral for speleotherapy

e. Antihistamine therapy

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

a. Tularemia

**b. Anthrax**

c. Nonspecific lymphadenitis

d. Plague

e. Brucellosis

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

a. Dysentery

**b. Nonspecific ulcerative colitis**

- c. Cancer of the large intestine
- d. Crohn's disease
- e. Chronic enteritis

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

- a. Brain abscess
- b. Epidural hematoma**
- c. Ischemic stroke in the area of the right cerebral peduncle
- d. Characteristics associated with the course of concussion
- e. Subarachnoid hemorrhage

183. A 66-year-old man complains of marked weakness. The onset of the disease was acute: he developed fever and pain in the joints and along the muscles of his legs. Objectively, he has a violet-cyanotic erythema around his eyes and over the knee joints. His heart rate is 120/min., heart sounds are weakened. Blood test: leukocytes -  $12 \cdot 10^9/L$ , ESR - 40 mm/hour. Make the diagnosis.

- a. Atopic dermatitis
- b. Rheumatoid arthritis
- c. Dermatomyositis**
- d. Systemic lupus erythematosus
- e. Reactive polyarthritis

184. A 52-year-old man periodically develops a brief (2-3 minutes) constricting feeling behind the sternum, accompanied by dyspnea, when walking. During such an attack, the patient slows down or stops walking. This constricting feeling first occurred approximately one month ago. The patient has a history of essential hypertension and diabetes mellitus and smokes 1-2 packs of cigarettes per day. What is the most likely diagnosis in this case?

- a. Mitral stenosis
- b. Acute pericarditis
- c. Angina pectoris**
- d. Acute myocarditis
- e. Myocardial infarction

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

- a. Pulmonary tuberculosis
- b. Bronchiectasis
- c. Community-acquired pneumonia
- d. Chronic obstructive pulmonary disease**
- e. Bronchogenic carcinoma

186. A newborn girl has Apgar score of 7-8 points at the 1-5 minutes after birth. During the labor there was a brief difficulty with extraction of the shoulder girdle. After birth the baby presents with disturbed function of the proximal segment and forced position of the right arm. The shoulder is rotated inwards, the elbow is extended, the forearm is pronated, and the whole upper limb resembles an arm of a doll. What is the most likely clinical diagnosis in this case?

- a. Thoracic spine trauma
- b. Intracranial hemorrhage
- c. Erb-Duchenne palsy**
- d. Soft tissue injury of the right arm
- e. Osteomyelitis of the right arm

187. 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 it?

- a. Posthemorrhagic anemia
- b. Sideroblastic anemia
- c. Chronic iron-deficiency anemia
- d. Hypoplastic anemia
- e. Hemolytic anemia

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

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

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

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

190. During medical examination of high and middle school students, the doctors were assessing correlation between biological and calendar age of the school students based on the following criteria: height growth rate per year, ossification of the carpal bones, the number of permanent teeth. What additional development criterion should be assessed at this age?

- a. Vital capacity of lungs
- b. Development of secondary sex characteristics
- c. Chest circumference
- d. Body mass
- e. Hand strength

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

- a. Nitrogen oxide
- b. Carbon dioxide
- c. Sulfur dioxide
- d. Carbon monoxide
- e. Carbon disulfide

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

- a. Atrial fibrillation
- b. AV nodal tachycardia

- c. Supraventricular extrasystole
- d. Sinus tachycardia
- e. Ventricular fibrillation

193. A 55-year-old man complains of general weakness, decreased fluid excretion, and an aching pain in his heart. For the last 15 years he has been suffering from chronic pyelonephritis and undergoing an inpatient treatment. Objectively, his skin is dry and has a yellowish tinge. His pulse is 80/min., rhythmic, blood pressure - 100/70 mm Hg. Cardiac auscultation detects muffled heart sounds and a friction rub in the pericardium. Laboratory tests: creatinine - 1.1 mmol/L, glomerular filtration - 5 mL/min. What treatment is indicated for this patient?

- a. Xylit, Sorbitol
- b. Diuretics
- c. Rheopolyglucin (Dextran)
- d. Antibiotics
- e. Hemodialysis**

194. A 19-year-old student was urgently hospitalized due to a 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. Referral into the thoracic surgery unit
- b. Urgent thoracocentesis**

- c. Prescription of penicillin antibiotics
- d. Administration of furosemide
- e. Administration of cardiac glycosides

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

- a. Heart failure
- b. Acute pyelonephritis

**c. Acute glomerulonephritis**

- d. Exacerbation of chronic glomerulonephritis
- e. Myxedema

196. 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. Functional cardiopathy

**b. Infectious myocarditis**

- c. Somatoform autonomic dysfunction
- d. Hypertrophic cardiomyopathy
- e. Exudative pericarditis

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

**a. Manage the birth through the natural birth canal**

- b. Stimulation of labor activity
- c. Tocolytic therapy
- d. Amniotomy

e. Caesarean section

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

- a. Functional hallucinations
- b. Pseudohallucinations
- c. Visual hallucinations
- d. Derealization

e. Pareidolic illusions

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

a. Abdominal ultrasound

b. Myelogram

- c. Immune complex testing
- d. X-ray of the mediastinum
- e. Complete blood count

200. A 62-year-old woman undergoes treatment for bilateral gonarthrosis and has been regularly taking diclofenac sodium for 2 years. During the last six months she notes elevations of her blood pressure to  $160/100\text{ mm Hg}$ . X-ray of the knee joints shows decreased height of the inter-articular space, marginal growths on the articular surfaces, and epiphyseal osteoporosis. General urinalysis shows the following: specific gravity - 1010, erythrocytes - 5-6 in sight, leukocytes - 10-12 in sight, casts (cylinders) - 0-1 in sight, glucose - not detected, protein -  $0.22\text{ g/L}$ . Fasting plasma glucose -  $6.3\text{ mmol/L}$ . What is the most likely cause of the changes observed in the general urinalysis?

- a. Diabetic nephropathy
- b. Hypertensive nephropathy

c. Tubulointerstitial nephritis

- d. Urolithiasis
- e. Chronic glomerulonephritis

201. 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. Symptomatic bronchospasm
- b. Atopic bronchial asthma

c. Aspirin-induced asthma

- d. Infectious allergic bronchial asthma
- e. Exercise-induced asthma

202. A 70-year-old patient has undergone a surgery for the removal of a traumatic cataract of the right eye. Objectively, in the right eye  $\text{emphVisus}=0.8$  with the correction of  $+10.0\text{ D sph}$ , while in the left eye  $\text{emphVisus}=0.6$  without correction. What means of correction would be most advisable for this patient?

- a. Glasses: OD  $+10.0\text{ D sph}$ ; OS planum
- b. Cylindrical lenses
- c. No correction is needed
- d. Glasses: both lenses  $+10.0\text{ D sph}$

e. OD intraocular correction

203. Objectively, a 22-year-old patient has numerous non-inflammatory yellowish-brown and pale pink spots on the skin of the chest, neck, shoulders, and the sides of the torso. When the spots are scratched, the sign of "shavings" is observed. The disease onset was 2 years ago, the rashes were first noticed after a summer vacation by the sea. What is the most likely diagnosis in this case?

a. Tinea versicolor (Pityriasis versicolor)

- b. Pityriasis rosea Gibert
- c. Streptoderma

- d. Erythrasma
- e. Syphilitic roseola

204. A 54-year-old man was brought to a hospital with complaints of a sudden sharp pain in his chest that appeared when he was lifting a heavy object. The pain is localized in the center of his chest. It does not irradiate to other areas, nor does it intensify with changes in the position of the body. The pain is accompanied by nausea without vomiting. No respiratory symptoms are observed. The man has a history of essential hypertension and takes angiotensin-converting-enzyme inhibitors. Objectively, his skin is pale and moist. His pulse is 115/min., respiratory rate - 20/min. ECG shows sinus tachycardia. Chest X-ray shows a darkening in the upper left and lower right segments. His cardiac enzyme levels are normal. Make the diagnosis:

- a. Myocarditis
- b. Acute pericarditis
- c. Dissecting aortic aneurysm
- d. Acute myocardial infarction
- e. Strangulated hiatal hernia

205. A 10-year-old boy complains of muscle pain and difficulty climbing stairs and getting dressed. According to the patient's history, the complaints first arose 4 months ago, but lately he has developed intensified muscle pain, low appetite, and difficulty swallowing. Objectively, facial edema, purple periorbital erythema, and desquamation of the skin of the hands and torso are observed. What is the most likely diagnosis in this case?

- a. Juvenile rheumatoid arthritis
- b. Acute rheumatic fever
- c. Systemic scleroderma
- d. Dermatomyositis
- e. Systemic lupus erythematosus

206. A 29-year-old woman complains of infertility and an oligomenorrhea type of abnormal menstrual cycle. Objectively, she has the height of 160 cm and the body weight of 91 kg, growth of hair is observed on her face and thighs. Bimanual examination detects enlarged dense ovaries 5x6 cm in size on both sides. These data were confirmed by ultrasound. What is the most likely diagnosis in this case?

- a. Chronic bilateral adnexitis
- b. Adrenogenital syndrome
- c. Ovarian androblastoma
- d. Sclerocystic ovarian syndrome (Stein-Leventhal)
- e. Premenstrual syndrome

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

- a. Clopidogrel, 75 mg per day
- b. Aspirin, 100 mg per day
- c. Oral anticoagulants (warfarin or NOACs - dabigatran, rivaroxaban, apixaban)
- d. High doses of lipid-lowering agents (e.g., atorvastatin - 80 mg per day)
- e. Drugs that improve cerebral blood flow

208. 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 - 49%, significant myocardium thickening of the left ventricle and interventricular septum. What drug should be prescribed for the treatment?

- a. Hydrochlorothiazide
- b. Phenyhydinum (Nifedipine)
- c. Furosemide
- d. Enalapril
- e. Bisoprolol

209. A woman is 40 weeks pregnant. The fetus is in the longitudinal lie and cephalic presentation.

Pelvic size: 26-29-31-20. Expected weight of the fetus is 4800 gram. The labor contractions has been lasting for 12 hours, within the last 2 hours they were extremely painful, the parturient woman is anxious. The waters broke 4 hours ago. On external examination the contraction ring is located 2 finger widths above the navel, Henkel-Vasten sign is positive. Fetal heart rate is 160/min., muffled. On internal examination the uterine cervix is fully open, the head is engaged and pressed to the entrance into the lesser pelvis. What is the most likely diagnosis?

- a. Complete uterine rupture
- b. Anatomically contracted pelvis
- c. Threatened uterine rupture
- d. Abruption of the normally positioned placenta
- e. Hyperactive uterine contractions

210. A 46-year-old patient with temporarily undetermined diagnosis was prescribed pleurocentesis based on the results of the X-ray. The puncture yielded 1000 ml of a liquid with the following properties: clear, specific gravity - 1,010, protein content - 1%, Rivalta's test is negative, erythrocytes - 2-3 in the field of vision. What disorder are these pathologic changes characteristic of?

- a. Cardiac failure
- b. Pleural mesothelioma
- c. Pulmonary tuberculosis
- d. Pleuropneumonia
- e. Pulmonary cancer

211. Before her discharge from a hospital, a full-term newborn girl on the 3rd day of her life developed a recurrent vomiting with blood and stool resembling a "raspberry jelly". It is known that her mother refused to let her child receive any intramuscular injections. What laboratory test will be the most informative for confirmation of the diagnosis?

- a. Partial thromboplastin time
- b. Platelet count
- c. Bleeding time
- d. Prothrombin time
- e. Thrombin time

212. A pregnant woman at the term of 11-12 weeks was hospitalized into the gynecological department with uterine bleeding and cramping pain in her lower abdomen. Vaginal examination shows that her vagina is filled with blood clots and her cervical opening is 2 cm. A tense amniotic sac can be detected in the birth canal. The uterus is tense and enlarged to the size that corresponds to the period of 11-12 weeks of pregnancy. The discharge is profuse and bloody. What must the doctor do in this case?

- a. Perform conservative monitoring
- b. Prescribe progesterone
- c. Perform uterine curettage
- d. Conduct blood transfusion
- e. Conduct tocolytic therapy

213. Having examined a 52-year-old patient, the doctor diagnosed him with obesity (body mass index -  $34 \text{ kg/m}^2$ , waist circumference - 112 cm) and arterial hypertension (170/105 mm Hg). 2-hour postprandial blood sugar is 10.8 mmol/L. What biochemical blood analysis needs to be conducted to diagnose the patient with metabolic syndrome X?

- a. Electrolytes
- b. Lipid profile
- c. Bilirubin
- d. Creatinine and urea
- e. Calcium and phosphorus

214. A 32-year-old man has a closed cerebrocranial trauma, a closed chest trauma, and a closed right femoral fracture. His blood pressure was 100/60 mm Hg, pulse - 124/min., respiration rate - 28/min. Two hours after the skeletal traction was performed under topical lidocaine anesthesia, the patient's condition suddenly became worse. His face and neck became cyanotic, blood pressure - 60/40 mm Hg, heart rate - 160/min., respiration rate - 44/min. What complication has likely developed in this case?

a. Myocardial infarction, cardiogenic shock

**b. Fat pulmonary embolism**

c. Pulmonary embolism

d. Acute posthemorrhagic anemia

e. Pain shock

215. A 32-year-old man lives in an area that is endemic for echinococcosis. For the last 6 months he has been suffering from pain in his right subcostal region and fever. Echinococcal liver damage is suspected. What study will be the most informative in this case?

a. Biochemical testing

**b. Ultrasound examination**

c. Liver scan

d. Survey X-ray-of the abdominal cavity

e. Angiography

216. A surgery unit received a person with an incised stab wound on the upper third of the right thigh. Examination detects an incised stab wound 3.0x0.5x2.0 cm in size on the inner surface of the upper third of the right thigh. Bright-red blood flows from deep within the wound in a pulsing stream. Characterize this type of bleeding:

**a. Arterial**

b. Mixed

c. Parenchymatous

d. Capillary

e. Venous

217. A 44-year-old man was hospitalized with a perforated stomach ulcer 5 hours after the onset of the disease. The diagnosis was confirmed by radiological pneumoperitoneum. Signs of diffuse peritonitis are increasing. The patient has a concomitant disease - schizophrenia. The man absolutely refuses surgery. What would be the surgeon's next steps in this case?

a. Notify the deputy chief physician and carry out conservative treatment until the patient consents to the surgery

**b. Convene a council including the hospital administration and, based on the council's decision, immediately proceed with the patient's surgery**

c. Continue to persuade the patient until he consents to the surgery

d. Carry out conservative treatment using the Taylor's method

e. Refrain from surgical intervention and carry out comprehensive conservative treatment

218. A 38-year-old woman came to a dermatologist complaining of dry and peeling skin. Examination reveals a papular rash and fine peeling on the extensor surfaces of her knee and elbow joints; in the area of hair follicles there are wax-colored nodules that rise from the skin. These clinical signs are likely caused by insufficient dietary intake of the following substance:

a. Ascorbic acid

**b. Retinol**

c. Thiamine

d. Pyridoxine

e. Riboflavin

219. Having studied the relationship between the distance from villages to the local outpatient clinics and frequency of visits to the clinics among the rural population of this area, it was determined that the rank correlation coefficient in this case equals -0.9. How can this relationship be characterized?

**a. Strong inverse relationship**

b. Strong direct relationship

c. Moderate direct relationship

d. Moderate inverse relationship

e. -

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



- a. Scleroderma
- b. Periarthritis nodosa
- c. Juvenile rheumatoid arthritis
- d. Systemic lupus erythematosus

e. Dermatomyositis

221. A 24-year-old man has fallen on his feet from a fourth floor balcony. He felt a sharp pain in his back, because of which he was unable to stand up unassisted. Examination shows smoothed out lumbar lordosis. The spine axial load is positive. Palpation of the spinous processes, especially of Th12, is painful. Sensitivity and mobility of the legs are not disturbed. Make the diagnosis:

- a. Pelvic fracture with dysfunction of the pelvic organs
- b. Th12 fracture with dysfunction of the spinal cord
- c. Fracture of the lumbar spine spinous processes
- d. Th12 compression fracture without dysfunction of the spinal cord
- e. Lumbar spine contusion

222. A 42-year-old patient complains of dense edema of both hands, tightness of the skin of the face, intermittent pain in the joints, discoloration of the skin of the fingers when exposed to cold. Objectively, the following is observed: amimia of the face, telangiectasia, the skin of the hands is pale and cold. Capillaroscopy reveals reduced capillary density, giant capillaries, and hemorrhages. What is the most likely diagnosis in this case?

- a. Rheumatoid arthritis
- b. Reactive arthritis
- c. Dermatomyositis

d. Systemic scleroderma

e. Systemic lupus erythematosus

223. A premature newborn boy (pregnancy 5, birth 1, gestation term - 27 weeks) has irregular respiration of <30/min. after birth and SpO<sub>2</sub> of 70 %. Retractions of the pliable areas of the chest and expiratory groaning are observed. Without oxygen support, generalized cyanosis occurs. Auscultation reveals crepitus in the basal segments. There are no data on the prevention of respiratory distress syndrome in the baby. What treatment tactics must be chosen in this case?

- a. Provide artificial pulmonary ventilation with an Ambu bag and a mask
- b. Administer the surfactant preparation intratracheally within the first 15 minutes after birth
- c. Administer the surfactant preparation intratracheally 2 hours after birth
- d. Provide oxygen therapy using an oxygen tent
- e. Prescribe an antibacterial therapy

224. A 64-year-old woman has been suffering from diabetes mellitus for the last 14 years. Approximately 3 days ago the skin on the distal phalanx of the I toe on the left foot became cold and bluish-black in color. Mild pain is observed in the affected area. Pulse on the pedal arteries cannot be detected, pulse on the popliteal artery is retained. Glycemia is 12,4 mmol/l. US scan: stenosis of the shin arteries, collateral compensated blood flow. Ankle-brachial pressure index is 0,7. Foot X-ray: destruction of the distal phalanx of the I toe. Determine the grade of diabetic foot according to Wagner:

- a. IV
- b. I
- c. III
- d. II
- e. V

225. A 6-month-old child on breastfeeding is hospitalized in the inpatient department. After the child recovers, the doctor recommends the mother to start introducing solid food to the child's diet. What products should be introduced to the child's diet first?

- a. Grated apple
- b. Buckwheat porridge
- c. Semolina porridge

d. Vegetable puree

e. Fermented dairy products

226. A multigravida on the 38th week of her pregnancy complains of increased BP up to 140/90 mm

Hg, edema of the shins for 2 weeks. In the last month she gained 3.5 kg of weight. Urine analysis: protein - 0.33 g/L. What is the most likely diagnosis:

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

e. Mild preeclampsia

227. An emergency medical team arrived at the scene of an accident 4 minutes after the accident occurred and found 5 victims. Carry out medical triage and determine the order in which the accident victims must be provided medical aid. Who must receive medical aid first in this case?

- a. The second passenger of the first car, a 6-year-old boy, has multiple facial lacerations
- b. The driver of the first car, a 32-year-old man, hit the steering wheel and complains of chest pain
- c. The passenger of the first car, a 27-year-old pregnant woman, somewhat agitated, complains of pain in the area of her right shoulder, other injuries not detected

d. The driver of the second car, a 55-year-old man, hit the windshield and does not move, his condition is considered to be clinical death

e. The passenger of the second car, a 57-year-old man, complains of pain in the area of his right thigh, medium-sized brown spots appeared on the right leg of his pants, the spots do not increase in size

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

a. Dressler's syndrome

- b. Pulmonary thromboembolism
- c. Acute myocarditis
- d. Sjogren's syndrome
- e. Recurrent myocardial infarction

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

- a. Joint
- b. Combined

c. Complex

- d. Separate
- e. Synergistic

230. A 13-year-old girl was brought into the gynecological department with complaints of profuse bloody discharge from her genital tracts for the last 10 days. Menarche was at the age of 11, the menstrual cycle is irregular. Rectoabdominal examination detects no pathology. Make the provisional diagnosis:

- a. External genital tract injury
- b. Adenomyosis
- c. Werlhof's disease (immune thrombocytopenic purpura)

d. Juvenile uterine bleeding

e. Endometrial polyp

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

- a. Surgical embolectomy
- b. Prescribing aspirin (acetylsalicylic acid)
- c. Prescribing low molecular weight heparin

- d. Installing a vena cava filter
- e. Thrombolytic injection into the left pulmonary artery

232. A 20-year-old man suffers from headache, general weakness, and face edema that appears in the morning. 18 days earlier he had a case of tonsillitis. Objectively, his skin is pale, there are edema under his eyes. Heart rate is 60/min., blood pressure is 185/100 mm Hg. The sign of costovertebral angle tenderness (punch sign in the lumbar region) is negative. Urinalysis: color of "meat slops", protein - 4.5 g/L, altered erythrocytes - 40-45 in the vision field, leukocytes - 5-6 in the vision field. 24-hour diuresis is 400 mL. What is the most likely diagnosis?

- a. Systemic lupus erythematosus
- b. Renal amyloidosis
- c. Acute pyelonephritis

**d. Acute glomerulonephritis**

- e. Urolithiasis

233. A 37-year-old man suddenly developed acute headache accompanied by nausea, vomiting, and impaired consciousness. Objectively blood pressure is 190/120 mm Hg, the face is hyperemic. Patient's consciousness is clouded, his answers to the questions are short, monosyllabic. Movement and sensory disturbances are absent. Meningeal signs are positive. Cerebrospinal fluid contains blood. What provisional diagnosis can be made?

- a. Meningitis
- b. Encephalitis
- c. Cerebral vascular embolism

**d. Subarachnoid hemorrhage**

- e. Ischemic stroke

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

- a. Comprehensive

**b. Preliminary (pre-placement)**

- c. Routine
- d. Targeted
- e. Periodical

235. One year ago a 46-year-old woman underwent a partial thyroidectomy due to multinodular goiter. Now she complains of general weakness, drowsiness, constant fatigue, low working ability, constipations, edema of her face and limbs. Objectively, her body temperature is  $36^{\circ}\text{C}$  Her skin is dry and wrinkled. She started losing her hair and developed amenorrhea. What condition is it?

- a. Thyrotoxicosis
- b. Chronic thyroiditis
- c. Hypoparathyroidism
- d. Subclinical hypothyroidism

**e. Primary hypothyroidism**

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

- a. Acute viral respiratory infection
- b. CO poisoning

**c. Heat stroke**

- d. Acute food poisoning
- e. Hypertensive urgency

237. A 28-year-old man was hospitalized on the 9th day of illness with complaints of fever of  $39^{\circ}\text{C}$ , headache, general weakness, constipation, and disturbed sleep. Objectively, on the skin of his abdomen there are isolated roseolas, his pulse is 78/min., the liver is enlarged by 2 cm. Make the diagnosis:

- a. Epidemic typhus
- b. Leptospirosis
- c. Brucellosis

d. Sepsis

**e. Typhoid fever**

238. In April, during medical examination of the population, 27% of the examined people complained of their decreased working ability and high fatigability. Examination revealed swollen loose gums that markedly bleed when pressed. On the skin, follicular hyperkeratosis is observed against the background of normal skin moisture. What pathology is the most likely cause of this condition?

a. Hypovitaminosis B<sub>1</sub>

**b. Hypovitaminosis C**

c. Polyhypovitaminosis

d. Hypovitaminosis A

e. Periodontosis

239. A 27-year-old woman at 17 weeks of her pregnancy has been hospitalized for treatment. She has a history of two spontaneous miscarriages. Bimanual examination reveals that her uterus is enlarged to 17 weeks of pregnancy, the cervix is shortened, and the opening allows inserting a fingertip. The woman was diagnosed with cervico-isthmic insufficiency. Specify the further tactics of managing this patient.

a. Terminate the pregnancy

b. Provide tocolytic therapy

c. Perform amniocentesis

d. Provide hormonal therapy

**e. Apply cervical stitch**

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

a. Euphylline (Aminophylline)

b. Adrenaline

c. Dexamethasone

d. Claritin (Loratadine)

**e. Salbutamol or short-acting beta2-agonists**

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

**a. Adrenogenital syndrome, salt-wasting form**

b. Adrenogenital syndrome, simple- virilizing form

c. Turner syndrome

d. Hermaphroditism

e. Adrenogenital syndrome, hypertensive form

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

a. Kidney tumor

b. Ovarian cystoma

c. Endometriosis

d. Pregnancy

**e. Nodular uterine leiomyoma**

243. Against the background of a fever of 39.5 °C, a 2-year-old boy with an acute respiratory viral disease developed an attack of generalized tonic-clonic seizures with loss of consciousness. The attack lasted 3 minutes. After the attack, the child is conscious and mildly sleepy. Neurologically, no pathology was detected, neuropsychological development corresponds with the child's age.

Previously, the child had no such attacks or any central nervous system disorders. What type of convulsive syndrome is most likely in the child?

- a. Psychogenic nonepileptic seizure
- b. Typical absences
- c. Symptomatic epilepsy
- d. Spasmophilia

e. Febrile seizures

244. A 32-year-old woman complains of marked shortness of breath, dry cough, a fever of  $39^{\circ}\text{C}$ , and excessive sweating. Bacterioscopy of her sputum detected acid-fast bacteria [+]. Mantoux test with 2 tuberculin units resulted in a papule 21 mm in size. X-ray visualizes numerous symmetrically located focal shadows 1-2 mm in size in both lungs. The shadows are low-intensity and have blurry contours.

What is the most likely diagnosis in this case?

- a. Sarcoidosis
- b. Focal tuberculosis
- c. Caseous pneumonia
- d. Chronic disseminated pulmonary tuberculosis

e. Miliary pulmonary tuberculosis

245. A 20-year-old man, a calibrator of dosimetry equipment, committed a gross violation of safety regulations, when he put two ampoules with cobalt-60, each with the radioactivity of 7 MCi, in the pockets of his trousers and jacket. He has been keeping the ampoules in his pockets for 8 hours. The tissues at the distance of 0.5 cm from the source received the dose of 30 Gy (3000 R), while the tissues at the distance of 20 cm - 2 R. Did this man develop radiation sickness?

- a. Yes, he developed chronic radiation syndrome
- b. Yes, he developed a severe form of acute radiation syndrome

c. No, he did not

- d. Yes, he developed a mild form of acute radiation syndrome
- e. Yes, he developed a moderate form of acute radiation syndrome

246. A 39-year-old woman complains of high body temperature of  $37.8^{\circ}\text{C}$  that persists for two days already, frequent urination, and a dull lumbar pain. These signs appeared for the first time, after an overexposure to cold. During physical examination, palpation of the renal region is painful. Urinalysis shows the following: pH - alkaline, protein - 0.099 g/L, leukocytes cover the whole vision field, erythrocytes - 0 in the vision field, cylinders - 0 in the vision field. Complete blood count shows the following: hemoglobin - 140 g/L, leukocytes -  $9.2 \cdot 10^9/\text{L}$ , ESR - 30 mm/hour. What medicine should be chosen for empiric antibiotic therapy in this case?

- a. Amikacin
- b. Amoxicillin
- c. Fosfomycin
- d. Trimethoprim/sulfamethoxazole

e. Ciprofloxacin

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

- a. Poliomyelitis
- b. Rabies
- c. Peritonsillar abscess

d. Tetanus

e. Encephalitis

248. A 35-year-old forestry officer was delivered to the hospital on the 7th day after the onset of the disease. He complains of chills, elevated body temperature up to  $40.0^{\circ}\text{C}$ , sharp headache, and myalgias. On examination his face is puffy and hyperemic, the tongue is dry, "chalk-dusted". In the left inguinal area, a sharply painful conglomeration of enlarged lymph nodes can be palpated. The skin over the conglomeration is hyperemic and tense. What etiotropic therapy should be prescribed to

this patient?

a. Streptomycin

b. Ribavirin

c. Ketoconazole

d. Human immunoglobulin intravenously

e. Administration of heterologous serum

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

a. Schizophrenia with paranoia

b. Reactive stupor

c. Simple-type schizophrenia

d. Hebephrenic schizophrenia

e. Catatonic schizophrenia

250. A woman complains of muscle weakness and general fatigue, dyspnea, vertigo, brittleness of her hair and nails, an urge to eat chalk. Anamnesis states uterine fibroid. Common blood analysis: erythrocytes -  $2,8 \text{ T/l}$ , Hb-  $80 \text{ g/l}$ , color index -  $0,78$ , anisocytosis, poikilocythemia, serum iron -  $10 \text{ mcmol/l}$ . What diagnosis is most likely?

a. B<sub>12</sub>-deficient anemia

b. Hypoplastic anemia

c. Aplastic anemia

d. Iron-deficiency anemia

e. Autoimmune hemolytic anemia

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

a. Carbon monoxide poisoning

b. Potassium cyanide poisoning

c. Arsenic poisoning

d. Alcohol poisoning

e. Aniline poisoning

252. A child is 1 month 10 days old. "Gushing" vomiting has been observed since the age of 3 weeks. The vomit volume exceeds the volume of the previous feeding. Objectively: the child is inert. Skin elasticity and tissue turgor are decreased. Hour-glass deformity sign is positive. The preliminary diagnosis is pyloric stenosis. What treatment tactics should be chosen?

a. Surgery

b. Internal administration of Novocaine

c. Prescription of Pipolphen

d. Atropinization

e. Prescription of Cerucal (Metoclopramide)

253. For the last 2 years, a 51-year-old woman has been experiencing a dull pain with periodical exacerbations in her right subcostal region. The pain is associated with eating fatty foods. The woman complains of bitterness in her mouth in the morning, constipations, and flatulence. Objectively, she is overeating,  $t^{\circ} - 36.9^{\circ}\text{C}$ , the tongue is coated near its root, the abdomen is moderately distended and painful at the point of gallbladder projection. What study would be the most useful for making a diagnosis?

a. Abdominal ultrasound

b. Liver scan

c. Cholecystography

d. Duodenal sounding



e. Duodenoscopy

254. A 31-year-old woman complains of pain and swelling in her radiocarpal and metacarpophalangeal joints and morning stiffness for up to 1.5 hours. These signs are observed for the last 3 years. Two weeks ago she developed pain, swelling, and redness in her knee joints and fever of  $37.5^{\circ}\text{C}$ . Examination of her internal organs shows no pathological changes. She was diagnosed with rheumatoid arthritis. What changes will most likely be visible on the X-ray scan of her joints?

- a. Cysts in the subchondral bone
- b. Narrowing of the joint space, erosions (bone lesions)**
- c. Osteolysis of the epiphyses
- d. Narrowing of the joint space, subchondral osteosclerosis
- e. Multiple marginal osteophytes

255. A 37-year-old patient complains of general weakness, spastic pain in the lower segments of the abdomen, mainly in the left iliac region, and loose stools with mucus and blood up to 18 times a day. The disease onset was acute and occurred three days ago with chills, feeling hot, and a headache. The patient's general condition is moderately severe, body temperature -  $37.8^{\circ}\text{C}$ . Palpation detects spastic and painful sigmoid colon. What is the most likely diagnosis in this case?

- a. Amoebiasis
- b. Shigellosis**
- c. Yersiniosis
- d. Salmonellosis
- e. Non-specific ulcerative colitis

256. 10 hours after birth a child developed jaundice, hypotonia, hyporeflexia, and moderate hepatosplenomegaly. Feces and urine are of normal color. Umbilical cord blood bilirubin is  $51\text{ }\mu\text{mol/L}$  due to unconjugated bilirubin levels. In venous blood: erythrocytes -  $3.5 \cdot 10^{12}/\text{L}$ , Hb-  $140\text{ g/L}$ , reticulocytes -  $1.5\%$ , bilirubin -  $111\text{ }\mu\text{mol/L}$ , conjugated -  $11\text{ }\mu\text{mol/L}$ , ALT-  $40\text{ U/L}$ , AST-  $30\text{ U/L}$ . Mother's blood group is A(II) Rh(-), child's blood group is A(II) Rh(+). What laboratory test can confirm the diagnosis?

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

**e. Coombs test**

257. A 5-day-old girl from the first pregnancy was born with the weight of  $3100\text{ g}$  and the length of  $51\text{ cm}$ . Her Apgar score was 8/9. On the 3rd day she developed icteric skin. On the 4th day of life her condition is satisfactory, she suckles well, her voice is loud. The umbilical wound is clean. In the lungs there is a puerile respiration, heart sounds are sonorous. The abdomen is soft, the liver is  $+1\text{ cm}$ , the spleen is  $0$ . The feces are yellow. The blood group of the mother is A (II) Rh+. The blood group of the child is 0 (I) Rh+. Bilirubin levels on the 4th day are as follows: indirect -  $140\text{ }\mu\text{mol/L}$ , direct -  $0$ , ALT -  $25\text{ }\mu\text{mol/L}$ , AST -  $18\text{ }\mu\text{mol/L}$ . Make the diagnosis:

- a. Hemolytic disease of the newborn
- b. Congenital hepatitis
- c. Hemolytic anemia

**d. Physiological jaundice**

e. Biliary atresia

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

**a. Intussusception**

- b. Enterocystoma
- c. Tumor of the abdominal cavity
- d. Helminth infestation
- e. Intestinal duplication

259. A 36-year-old man complains of nausea, recurrent episodes of vomiting, and pain in the right

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

- a. Acute pancreatitis
- b. Intestinal obstruction
- c. Acute gastritis
- d. Right-sided renal colic
- e. Acute cholecystitis**

260. A 25-year-old pregnant woman was hospitalized due to uterine bleeding. Total blood loss - 250 mL. Examination detects 10-11 weeks of pregnancy with a spontaneous miscarriage in progress. What would be the further doctor's tactics in this case?

- a. Perform hemotransfusion
- b. Prescribe uterotonics
- c. Place a cervical stitch (cervical cerclage)
- d. Remove the fertilized ovum**
- e. Prescribe antispasmodics

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

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

262. A 22-year-old pregnant woman was hospitalized in a severe condition. Throughout the past three days, she developed edemas, headache, nausea, and one episode of vomiting. Objectively, her consciousness is clouded, her blood pressure is 160/130 mm Hg. She presents with small fibrillar twitching of the facial muscles and problems with nasal breathing. During transportation, the woman's arms started twitching, her body stretched out, her spine curved, her jaws tightly clenched, and she stopped breathing. Then she developed clonic seizures and marked cyanosis. After that, the seizures stopped, a deep noisy inhale occurred, and blood-stained foam appeared on the patient's lips. What is the most likely diagnosis in this case?

- a. Chorea
- b. Eclampsia**
- c. Hypertensive crisis
- d. Epilepsy
- e. Diabetic coma

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

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

264. A 39-year-old man came to a doctor complaining of a pain in his left leg. The disease onset was 2 days ago. Objectively, his body temperature is  $37.8^{\circ}C$  and he has subcutaneous varicose veins on the inner surface of his left thigh and shin. The skin over the varicose veins is hot and red. The Moses and Homans signs are negative. What is the most likely diagnosis in this case?

- a. Acute ascending thrombophlebitis of the saphenous veins in the left leg**
- b. Postthrombotic syndrome of the left leg

- c. Thrombosis of the tibial arteries on the left
- d. Acute deep vein thrombosis in the left leg
- e. Varicose saphenous veins in the left leg

265. A 45-year-old man came to the hematologist with complaints of general weakness, elevated body temperature, excessive sweating, enlarged cervical lymph nodes. Objectively, his body temperature is  $37.5^{\circ}\text{C}$ , the skin is pale and dry, the posterior cervical lymph nodes are dense and elastic, up to 2 cm in diameter, mobile. Hepatosplenomegaly was detected. What examination is necessary to determine the scope of the pathologic process?

- a. Bone scintigraphy
- b. Complete blood count
- c. Abdominal X-ray
- d. Ultrasound of the cervical lymph nodes

**e. Computed tomography**

266. A pregnant woman is 28 years old. Anamnesis: accelerated labor complicated by the II degree cervical rupture. The following two pregnancies resulted in spontaneous abortions at the terms of 12 and 14 weeks. On mirror examination: the uterine cervix is scarred from previous ruptures at 9 and 3 hours, the cervical canal is gaping. On vaginal examination: the cervix is 2 cm long, the external orifice is open 1 cm wide, the internal orifice is half-open; the uterus is enlarged to the 12th week of pregnancy, soft, mobile, painless, the appendages are without changes. What diagnosis would you make?

- a. Cervical hysteromyoma, habitual noncarrying of pregnancy
- b. Threatened spontaneous abortion
- c. Incipient abortion, habitual noncarrying of pregnancy
- d. Cervical pregnancy, 12 weeks

**e. Isthmico-cervical insufficiency, habitual noncarrying of pregnancy**

267. A 65-year-old man complains of asphyxia, cough with pink foaming sputum, sensation of lack of air, and fear of death. Objectively, he has orthopnea, pale skin, and acrocyanosis and is covered in cold sticky sweat. His respiration is harsh, in the lower posterior segments there are wet finely vesicular and moderately vesicular crackles on the both sides. His respiratory rate is 40/min. The heart sounds are markedly muffled. At the cardiac apex, the gallop rhythm is observed. Make the diagnosis:

- a. Pulmonary embolism
- b. Status asthmaticus
- c. Infarction pneumonia
- d. Croupous pneumonia

**e. Pulmonary edema**

268. A 39-year-old man suffers from chronic rheumatic heart disease. He complains of dyspnea during physical exertion, cough with expectoration, and palpitations. Auscultation detects intensified I heart sound and diastolic murmur; the sound of opening mitral valve can be auscultated at the cardiac apex. The II heart sound is accentuated over the pulmonary artery. The patient is cyanotic. X-ray shows dilated pulmonary root and enlargement of the right ventricle and left atrium. What is the most likely diagnosis?

- a. Pulmonary artery stenosis
- b. Patent ductus arteriosus
- c. Aortic stenosis
- d. Coarctation of the aorta

**e. Mitral stenosis**

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

- a. Terminal
- b. Intermittent
- c. Compensated**
- d. Polyuric
- e. Latent

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

- a. Acute prostatitis
- b. Renal tuberculosis
- c. Systemic lupus erythematosus
- d. Acute pyelonephritis**

e. Acute glomerulonephritis

271. 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 prostatitis
- c. Chronic pyelonephritis
- d. Chronic cystitis
- e. Acute glomerulonephritis

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

**a. Infiltrative tuberculosis**

- b. Pneumonia
- c. Pleurisy
- d. Bronchial asthma
- e. Lung abscess

273. An 18-year-old young man was hospitalized after a fight with signs of internal bleeding. Anamnesis states that he has hemophilia A) He was diagnosed with an extraperitoneal hematoma. What must be prescribed to the patient first?

**a. Cryoprecipitate**

- b. Dried plasma
- c. Fresh blood
- d. Aminocaproic acid
- e. Packed platelets

274. A woman, who works at a pig farm, against the background of complete health developed sudden chills, fever of  $39.9^{\circ}C$ , intense headache, and nausea. The next day, she noted a pain in her leg muscles and nosebleeds. Objectively, on the 3rd day after the onset of the disease the woman's condition is severe, her face is hyperemic, she has scleritis and subicteric sclerae. The liver is +3 cm. 24-hour urine output is 700 mL. Make the diagnosis:

- a. Hemorrhagic fever with renal syndrome
- b. Yersiniosis
- c. Viral hepatitis
- d. Influenza

**e. Leptospirosis**

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

a. Increase the dose of metformin to 3000 mg per 24 hours

**b. Prescribe insulin therapy and discontinue metformin**

c. Continue the treatment unchanged

- d. Add GLP-1 analogues to metformin
- e. Discontinue metformin and switch to sulfonylureas

276. At night a 63-year-old woman suddenly developed an asphyxia attack. She has a 15-year-long history of essential hypertension and had a myocardial infarction 2 years ago. Objectively her position in bed is orthopneic, the skin is pale, the patient is covered with cold sweat, acrocyanosis is observed. Pulse - 104/min. Blood pressure - 210/130 mm Hg, respiration rate - 38/min. Pulmonary percussion sound is clear, with slight dullness in the lower segments; throughout the lungs single dry crackles can be heard that become bubbling and non-resonant in the lower segments. What is the most likely complication in this patient?

- a. Paroxysmal tachycardia
- b. Bronchial asthma attack
- c. Acute right ventricular failure

**d. Acute left ventricular failure**

- e. Pulmonary embolism

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

- a. Encephalitis
- b. Involutional depression
- c. Brain tumor

**d. Alzheimer's disease**

- e. Vascular dementia

278. A 65-year-old man complains of dyspnea, severe cough with expectoration of small amounts of blood-streaked sputum, weight loss, body temperature  $37.2^{\circ}\text{C}$ , loss of appetite, and weakness. He has been suffering from this condition for years. The patient's condition deteriorated one year ago, dyspnea developed 3 weeks ago. The patient is a lifelong smoker. He is a carpenter by occupation. Objectively he is of normal body type but emaciated. Right side of the chest is retracted, excursions are limited, accessory muscles take part in the respiration, respiratory rate is 22/min. Percussion detects dull sound over the right upper segment. Chest X-ray shows shrunken right upper lobe with homogeneous shadow connected to the root of the lung; the root is deformed; mediastinal organs are displaced to the right. What is the most likely diagnosis?

- a. Pulmonary sarcoidosis
- b. Complete right-sided pneumothorax
- c. Pulmonary tuberculosis

**d. Obstructive atelectasis**

- e. Fibrosing alveolitis

279. In a rural health care area there is an increasing cervical cancer morbidity observed. The decision is made to conduct a medical examination of the women living in this locality. What type of medical examination is it?

- a. Screening
- b. Preliminary

**c. Target**

- d. Regular
- e. Complex

280. An ambulance team has brought a man diagnosed with acute respiratory viral infection into the inpatient department. The onset of the disease was acute, with fever of  $39.9^{\circ}\text{C}$ . The patient complains of a headache in his fronto-temporal regions, pain in the eyeballs, aches all over his body, stuffed nose, sore throat, and dry cough. At home, he had two episodes of nosebleeds. What type of acute respiratory viral infection does this patient have?

- a. Parainfluenza
- b. Adenovirus infection

- c. Respiratory syncytial infection
- d. Enterovirus infection

**e. Influenza**

281. A 58-year-old woman undergoing chemotherapy for her oncologic disorder has developed sore throat. Examination revealed necrotic areas on the mucosa of the pharynx and tonsils. Many of her teeth are afflicted with caries. In blood: neutrophilic granulocytes are practically absent against the background of leukopenia. Leukocytes are represented mainly by lymphocytes and monocytes. What disease can be suspected in the given case?

- a. Syphilitic tonsillitis
- b. Pseudomembranous (Vincent's) tonsillitis
- c. Lacunar tonsillitis

**d. Agranulocytic tonsillitis**

**e. Diphtheria**

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

- a. Manic syndrome
- b. Obsessive-compulsive disorder

**c. Kandinsky-Klerambault syndrome**

**d. Paraphrenic syndrome**

**e. Verbal hallucinosis**

283. A 2-year-old boy against the background of lacunar tonsillitis developed problematic breathing through the nose and mouth. Mesopharyngoscopy shows hyperemic palatine tonsils and posterior pharyngeal wall, yellow films in the openings of the tonsillar crypts, and a protrusion on the posterior wall of the oropharynx that fluctuates during palpation. What complication must be avoided during the surgical treatment of this condition?

**a. Pus aspiration**

- b. Disturbed lymphatic efflux
- c. Major vessel injury
- d. Mediastinitis
- e. Esophagitis

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

**a. Von Willebrand disease**

**b. Multiple myeloma**

- c. Acute lymphoblastic leukemia
- d. Ankylosing spondylitis
- e. Systemic lupus erythematosus

285. In a 35-year-old patient, the disease onset was violent, with chills, a fever of  $39^{\circ}C$ , vomiting, pain in the epigastrium, and diarrhea with green-tinted watery stools with mucus. Six hours before the illness onset, this person ate a raw egg and fried potatoes with a meat stew and drank juice. What pathogen is the most likely cause of this health condition?

- a. *Campylobacter*
- b. *Shigella*

**c. *Salmonella***

**d. *Vibrio cholerae***

**e. *Escherichia coli***

286. A 34-year-old man fell ill 3 days ago after an overexposure to cold. He complains of a fever of  $39.2^{\circ}C$ , marked general weakness, sweating, and cough. The cough was initially dry, but within the last 24 hours a small amount of "rusty" sputum was produced. Objective examination detects herpes



on the lips. Percussion reveals a dull sound in the lower pulmonary lobes. Auscultation detects bronchial breathing and tachycardia. No changes were detected in the organs of the abdominal cavity. What is the most likely diagnosis in this case?

a. Lung abscess

**b. Croupous pneumonia**

c. Nosocomial pneumonia

d. Exudative pleurisy

e. Community-acquired focal pneumonia

287. A 32-year-old woman complains of visual impairment, frequent headaches accompanied by nausea, and irregular menstrual cycle. These complaints were observed for the past three months. In neurological status, bitemporal hemianopsia is observed. Laboratory testing detects increased prolactin levels in the blood. What is the most likely diagnosis in this case?

a. Multiple sclerosis

b. Physiological hyperprolactinemia

c. Cerebral infarction

d. Optic nerve atrophy

**e. Pituitary adenoma**

288. A 40-year-old patient was bitten by a stray dog an hour ago. On the left shin there is a bite mark - the wound is 4x2x0,5 cm in size. What surgical aid would be most efficient in this case?

a. Retension sutures

b. Blind suture

c. Aseptic dressing

d. Salve dressing

**e. Lavage with soapy water, retension sutures**

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

a. Immunoglobulin D

b. Immunoglobulin G

**c. Immunoglobulin E**

d. Immunoglobulin M

e. Immunoglobulin A

290. A parturient woman has been in labor for 8 hours. The labor activity is weak, contractions last for 25 seconds and occur twice per 10 minutes. Vaginal examination shows cervical opening of 4 cm, the baby is in the cephalic presentation. During examination the woman's waters broke. The waters contained meconium. Fetal heart rate is 90/min., dull. What tactics of labor management must be chosen in this case?

a. Observation and treatment of fetal distress

**b. Urgent delivery by means of a cesarean section**

c. Continue the conservative management of labor with continuous monitoring of the fetus

d. Prescribe labor stimulation with oxytocin solution

e. Apply obstetric forceps

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

**a. Simple absence seizure**

b. Atonic absence seizure

c. Attack of focal motor epilepsy

d. Vago-insular paroxysm

e. Syncopal state

292. The mother of a 5-year-old girl complains of nocturnal incontinence in her child, night terrors,

disturbed sleep, and low weight gain. Objectively, the girl is undereating, intellectually well developed, can read, explains life situations as an adult. Her skin is pale, the liver is enlarged. The mother suffers from cholelithiasis. What type of diathesis is most likely in this child?

- a. Uric acid diathesis
- b. Exudative-catarrhal diathesis
- c. Lymphatic-hypoplastic diathesis
- d. Neuroarthritic diathesis**
- e. Allergic diathesis

293. 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  $37.8^{\circ}\text{C}$ , general weakness, weight loss. The patient's condition lasts for 4 years. Exacerbations occur 2-3 times a year. The patient presents with malnutrition, pale skin, cyanosis of the lips, drumstick (clubbed) fingers. Tympanic percussion sound in the lungs, weakened respiration, and various numerous moist crackles in the lower pulmonary segments on the left can be observed in this patient. Complete blood count: 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. Left-sided pulmonary cystic dysplasia
- d. Suppuration of the cyst in the left lung
- e. Chronic abscess of the left lung

294. A 5-year-old girl was hospitalized with complaints of pain and swelling in the right knee joint, temperature rise up to  $38.4^{\circ}\text{C}$  and a rash diagnosed as erythema annulare centrifugum. The signs developed 3 days after the recovery from a case of acute respiratory disease. Name the etiotropic drug to be prescribed:

- a. Metypred (Methylprednisolone)
- b. Methotrexate

**c. Augmentin**

- d. Captopril
- e. Diclofenac sodium

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

- a. Acute pericarditis

**b. Acute myocarditis**

- c. Pulmonary thromboembolism
- d. Mitral insufficiency
- e. Acute myocardial infarction

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

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

**e. Fluorine**

297. A 32-year-old woman during an occupational medical examination underwent a colposcopy that revealed a punctuation area in zone 1 of the uterine cervix. Cytologically there was dysplasia of the 3rd degree detected. After additional examination, the patient was diagnosed with emphyCa in situ of the uterine cervix. What treatment method should be chosen in this case?

- a. Cervical conization**

- b. Radiation therapy
- c. Uterine extirpation with appendages
- d. Uterine extirpation without appendages
- e. Wertheim operation

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

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

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

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

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

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

301. A 35-year-old patient's wound with suppurative focus was surgically cleaned. On the 8th day after the surgery the wound cleared from its purulo-necrotic content and granulations appeared. However, against the background of antibacterial therapy the body temperature keeps at 38,5-39,5<sup>o</sup>C) There are chills, excessive sweating, euphoria, heart rate is 120/min. What complication of local pyoinflammatory process can it be?

- a. Purulent absorption fever
- b. Trombophlebitis
- c. Pneumonia
- d. Sepsis**
- e. Meningitis

302. A 51-year-old man was hit by a car. He complains of a pain in his pelvis on the left. Examination shows no disturbances of pelvic configuration, there is a swelling in the left inguinal region. Palpation of this region is sharply painful. The Larrey's sign and Gabai's sign are positive, the patient is unable to lift the extended leg, as if the heel was glued down. Make the provisional diagnosis:

- a. Pubic symphysis fracture
- b. Fracture of the superior pubic ramus**
- c. Superior iliac spine fracture
- d. Fractures of the base of the cotyloid cavity
- e. Fracture of the ischium

303. A 17-year-old patient objectively presents with no facial hair growth, gynecomastia, fat deposition on the hips, and a high-pitched voice. The patient is tall due to elongated lower limbs with a relatively short torso. Mental retardation is noted. Sex chromatin was detected in the buccal

epithelium. What is the most likely diagnosis in this case?

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

304. A 54-year-old woman has been suffering from femoral osteomyelitis for over 20 years. In the last month she developed gradually progressing leg edemas. In the urine: proteinuria - 6.6 g/L. In the blood: dysproteinemia in the form of hypoalbuminemia, increased alpha<sub>2</sub>- and gamma-globulin levels, ESR - 50 mm/hour. Make the diagnosis:

- a. Chronic glomerulonephritis
- b. Systemic lupus erythematosus
- c. Multiple myeloma
- d. Acute glomerulonephritis
- e. Secondary renal amyloidosis**

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

- a. Goodpasture syndrome**
- b. Acute glomerulonephritis
- c. Paraneoplastic nephropathy
- d. Wegener's granulomatosis
- e. Hemorrhagic vasculitis

306. A 63-year-old woman underwent a surgery for a large multinodular euthyroid goiter. Subtotal resection of the both lobes of the thyroid gland had to be performed, which was done with technical difficulties. On the 4th day after the surgery, the woman developed abdominal pain and muscle spasms in her face and arms. The Chvostek and Trousseau signs are positive. What is the most likely cause of the patient's condition?

- a. Damage to the recurrent nerve
- b. Thyrotoxic crisis

**c. Hypoparathyroidism**

- d. Postoperative hypothyroidism
- e. Tracheomalacia

307. In a city with the population of 400000, per year 5600 deaths are registered, including 3300 deaths caused by diseases of the circulatory system and 730 cases of neoplasm-related mortality. What parameter will allow to characterize the circulatory-related mortality in this city?

- a. Percentage correlation coefficient
- b. Relative intensity parameter

**c. Intensity parameter**

- d. Correlation coefficient
- e. Extensivity parameter

308. After a pain attack in the right subcostal area, a 58-year-old woman with overnutrition developed icteric skin and sclera, light-colored feces, and dark urine. Her abdomen is distended and painful on palpation in the right subcostal area. Palpation detects liver enlargement by 2-3 cm. Blood test: total bilirubin - 90 μmol/L, conjugated bilirubin - 60 μmol/L. What method of examination will be the most informative for diagnosis clarification?

- a. US of the hepatopancreatobiliary zone
- b. Intravenous cholegraphy
- c. Percutaneous transhepatic cholegraphy
- d. Infusion cholegraphy

**e. Retrograde cholangiopancreatography**

309. A 30-year-old woman complains of pain in her lower abdomen, a fever of 38.8°C, and profuse gray-yellow foul-smelling liquid discharge from the genital tract. According to the patient's history, the complaints arose after a sexual intercourse. Examination reveals that the appendages on both sides

are enlarged and painful during palpation. What is the most likely diagnosis in this case?

- a. Endometriosis
- b. Acute trichomoniasis
- c. Gonococcal infection**
- d. Vaginal candidiasis
- e. Syphilis

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

- a. Mercury**
- b. Chrome
- c. Cadmium
- d. Strontium
- e. Iron

311. A 17-year-old girl complains of pain and swelling of the second finger on the right hand. She had a manicure done three days ago. The pain appeared on the second day. Objectively, the periungual ridge is edematous, hyperemic, overhangs the nail plate, painful during palpation. What is the most likely diagnosis in this case?

- a. Subungual felon
- b. Erysipeloid
- c. Cutaneous felon
- d. Subcutaneous felon

**e. Paronychia**

312. A 25-year-old parturient woman is hospitalized with contractions that have been occurring for 12 hours already. The contractions last 25 seconds, while the intervals between them last 3-4-7 minutes. The contractions are irregular and sharply painful, with pain spreading upwards from the lower uterine segment. The baby is in the cephalic presentation, the head is pressed to the entrance into the lesser pelvis. Uterine hypertonus is observed. Internal obstetric examination shows that the cervix is smoothed out and the opening of the external orifice of uterus is 3 cm. The amniotic sac is intact. Make the provisional diagnosis:

- a. Cervical dystocia
- b. Secondary weakness of the labor activity
- c. Primary weakness of the labor activity

**d. Discoordinated labor activity**

e. Physiological course of the labor

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

- a. Heparin
- b. Ethamsylate
- c. Vitamin D
- d. Vitamin C

**e. Vitamin K**

314. A 13-year-old girl complains of a febrile body temperature that is observed within the last month, pain in the joints, and periodical skin rash. Examination detects LE-cells and a persistent increase in ESR in the child's blood. Make the diagnosis:

**a. Systemic lupus erythematosus**

- b. Systemic scleroderma
- c. Rheumatism
- d. Juvenile rheumatoid arthritis
- e. Acute lymphoblastic leukemia

315. On the fifth day after a full-term birth, a postparturient woman developed a fever of  $38.8^{\circ}\text{C}$ , abdominal pain, and general weakness. Objectively, her blood pressure is 120/80 mm Hg, pulse is 100/min. The breasts are moderately distended. The abdomen is soft and participates in the act of

breathing. The uterine fundus is located three finger-widths below the navel. Vaginal examination shows that the cervix allows inserting one finger; the uterus is soft, painful, and enlarged to 13 weeks of pregnancy. There is a seropurulent foul-smelling discharge from the genital tracts. Make the diagnosis:

- a. Uterine subinvolution
- b. Lactostasis
- c. Postpartum endometritis
- d. Septic shock

**e. Postpartum purulent metroendometritis**

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

a. Hypothyroidism

**b. Thyrotoxicosis**

- c. Hypoparathyroidism
- d. Thymomegaly
- e. Hyperparathyroidism

317. A 22-year-old patient lies in bed with his head raised high and feels no discomfort in this position. He enters the conversation reluctantly, responds to whispered speech, gives one-word answers. His face is indifferent and hypomimic, the forehead is wrinkled, the lips are puckered. The patient moves very little and often freezes for a long time in an uncomfortable position. This condition has developed gradually over the course of a week with no apparent cause. What condition is observed in the patient?

- a. Depressive substupor
- b. Psychogenic stupor
- c. Exogenous stupor
- d. Apathetic substupor
- e. Catatonic substupor**

318. A 40-year-old man was brought into a hospital with a closed chest trauma. Examination shows that the right side of his chest lags behind during breathing. Palpation detects a sharp pain in the projection of ribs V, VI, and VII on the anterior axillary line and subcutaneous emphysema on the right side of the torso. Percussion reveals tympanitis over the right-sided segments of the chest. Auscultation detects no breathing on the right and vesicular breathing on the left. What surgical procedure is necessary for this patient?

- a. Splint stabilization of the rib fracture
- b. Drainage of subcutaneous emphysema
- c. Immediate thoracotomy
- d. Tight bandaging of the chest

**e. Drainage of the right pleural cavity**

319. A 22-year-old postparturient woman on the 12th day after the normal childbirth informs of fever up to  $39^{\circ}\text{C}$  for the last 3 days and pain in her right mammary gland. The right mammary gland is enlarged, hot to touch, tense, hyperemic, and painful. Palpation reveals there a dense infiltration 8x8 cm with a fluctuation in its center. What is the most likely diagnosis?

**a. Postpartum period, day 12. Right-sided infiltrative-purulent mastitis**

- b. Postpartum period, day 12. Right-sided serous mastitis
- c. Postpartum period, day 12. Right-sided phlegmonous mastitis
- d. Postpartum period, day 12. Right-sided gangrenous mastitis
- e. Postpartum period, day 12. Right-sided lactostasis

320. A 47-year-old man has been ill for 3 days already. Palpation detects a painful inflamed infiltration in his right subcostal region. His body temperature is  $38.9^{\circ}\text{C}$ . Sonography allowed diagnosing him with calculous destructive cholecystitis. Clinical and laboratory data are not indicative of choledocholithiasis. What tactics should be chosen for the treatment of this man?

**a. Surgical treatment - cholecystectomy**

- b. Complex anti-inflammatory therapy



- c. Cholagogues, hepatoprotectors, corticosteroids
- d. Monitoring, cholecystectomy if peritonitis starts developing
- e. Laparocentesis, abdominal drainage

321. A 33-year-old woman came to a maternity clinic with complaints of infertility for the last 5 years. The patient has a history of gonorrhea. Examination detects no deviations from the norm in the development of the patient's genitals. The basal temperature throughout three cycles is biphasic. What is the most likely cause of infertility in this case?

- a. Structural abnormalities of the genitals
- b. Endometriosis
- c. Endocrine pathology
- d. Immunological infertility
- e. Impaired patency of the fallopian tubes

322. A 15-year-old boy complains of pain attacks in his abdomen during defecation, diarrhea up to 6 times in 24 hours with pus and dark blood in the feces. Objectively, his physical and sexual development is delayed. The skin is pale and dry. The abdomen is distended and painful in the umbilical region and in the right iliac region. Crohn's disease is suspected. What examination is necessary to confirm the diagnosis?

- a. Rectoromanoscopy
- b. Fecal cytology
- c. Abdominal ultrasound
- d. Colonoscopy
- e. Fibroesophagogastroduodenoscopy

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

- a. Bronchiolitis
- b. Airway foreign body
- c. Pneumonia
- d. Acute stenosing laryngotracheitis
- e. Acute bronchitis

324. A 16-year-old girl addressed a doctor with complaints of fatigability and dizziness. On heart auscultation: systolic murmur in the II intercostal area along the breastbone edge on the left. ECG revealed signs of the right ventricular hypertrophy. X-ray revealed dilatation of the the pulmonary artery trunk, enlargement of the right heart. What heart disorder is it?

- a. Coarctation of aorta
- b. Fallot's tetrad
- c. Pulmonary artery outflow stenosis
- d. Pulmonary artery valve failure
- e. Defect of the interatrial septum

325. A 10-year-old girl was hospitalized with signs of carditis. According to her medical history, two weeks ago she had an exacerbation of chronic tonsillitis. What etiological factor is the most likely in this case?

- a. Proteus
- b. Pneumococcus
- c. Streptococcus
- d. Staphylococcus
- e. Klebsiella

326. Potatoes that became green or started sprouting, as a result of incorrect storage, taste slightly bitter. What toxic substance contained in such potatoes can cause food poisoning?

- a. Solanine
- b. Muscaridine
- c. Helvellic acid
- d. Phasin

e. Muscarine

327. A 51-year-old man complains of vomiting with blood. He has been drinking alcohol excessively. Health disorder has been observed since he was 40, when he first developed jaundice. On examination the skin and visible mucosa are icteric, with a stellate vascular pattern. The patient is malnourished and presents with abdominal distension, umbilical hernia, and ascites. The edge of the liver is tapered and painless, +3 cm, the spleen is +2 cm. Blood test: Hb- 80 g/L, leukocytes -  $3 \cdot 10^9/L$ , platelets -  $85 \cdot 10^9/L$ . What is the cause of portal hypertension in this patient?

a. Hepatic cirrhosis

b. Thrombosis of the splenic vein

c. Hemochromatosis

d. Budd-Chiari syndrome

e. Constrictive pericarditis

328. A 42-year-old woman has been hospitalized with complaints of intense pain attacks in the lumbar and right iliac areas, which irradiate to the vulvar lips, frequent urination, nausea. The pain onset was acute. Objectively: the abdomen is soft, moderately painful in the right subcostal area, costovertebral angle tenderness on the right. Common urine analysis: specific gravity - 1016, traces of protein, leukocytes - 6-8 in the vision field, erythrocytes - 12-16 in the vision field, fresh. What diagnosis can be made?

a. Acute cholecystitis

b. Acute appendicitis

c. Acute right-sided adnexitis

d. Right-sided renal colic

e. Acute right-sided pyelonephritis

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

a. Social rehabilitation

b. Medical rehabilitation

c. Target rehabilitation

d. Psychological rehabilitation

e. Occupational rehabilitation

330. An 18-year-old young man was hospitalized on the 7th day of illness with complaints of headache, general weakness, fever, and sore throat. Objectively, all the groups of lymph nodes are enlarged to 1-3 cm in diameter. Palpation shows dense, elastic, and slightly painless lymph nodes that are not matted together. Enlarged tonsils are covered with purulent plaque. The liver is +3 cm. In the blood: leukocytosis, relative lymphomonocytosis, virocytes - 15%. Make the diagnosis:

a. Acute lymphocytic leukemia

b. Diphtheria

c. Adenovirus infection

d. Infectious mononucleosis

e. Tonsillitis

331. A 34-year-old woman after rapidly changing her position from horizontal to vertical suddenly paled, fell down, her skin became moist, her limbs are cold, her pupils are dilated. The pulse is rapid and thready, blood pressure is 50/25 mm Hg. What condition has likely developed in the patient?

a. Morgagni-Adams-Stokes syndrome

b. Ventricular fibrillation

c. Collapse

d. Shock

e. Coma

332. Approximately 40 % of patients with bacterial pneumonia develop concomitant pleural effusion. This diagnosis can be confirmed by chest X-ray in the direct vertical projection, if there is at least:

a. 500 mL of liquid

b. 100 mL of liquid

c. 300 mL of liquid

d. 200 mL of liquid

e. -

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

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

**e. Stage I of labor**

334. A 45-year-old man diagnosed with acute pulmonary abscess suddenly developed sharp pain in his chest on the right and dyspnea up to 30/min. Examination detects facial cyanosis and shallow rapid respirations. Auscultation reveals acutely weakened respiration throughout the whole right lung; percussion reveals a vesiculotympanic (bandbox) resonance at the lung apex and dullness in the lower lobe. What complication developed in this patient?

- a. Pyopneumothorax**
- b. Acute mediastinitis
- c. Pneumothorax
- d. Esophageal perforation
- e. Pleuropneumonia

335. The effect of various risk factors on exacerbation of peptic ulcer disease of the stomach was studied. Among other factors, the seasonality of this disease was studied. What group of risk factors does it belong to?

- a. Exogenous uncontrollable**
- b. Endogenous uncontrollable
- c. Endogenous controllable
- d. Social controllable
- e. Exogenous controllable

336. A 58-year-old man complains of weakness and tumor-like formations that appeared on the anterior surface of his neck and in the inguinal region. Palpation detects soft painless mobile cervical and inguinal lymph nodes up to 2 cm in diameter. The liver protrudes by 2 cm from the edge of the costal margin, the lower splenic pole is at the umbilical level. In blood: erythrocytes -  $3.5 \cdot 10^{12}/L$ , Hb- 88 g/L, leukocytes -  $86 \cdot 10^9/L$ , band neutrophils - 1%, segmented neutrophils - 10%, lymphocytes - 85%, eosinophils - 2%, basocytes - 0%, monocytes - 2%, erythrocyte sedimentation rate - 15 mm/hour, Gumprecht shadows. What is the most likely diagnosis?

- a. Lymphocytic leukemoid reaction
- b. Chronic myeloleukemia
- c. Lymphogranulomatosis
- d. Acute leukemia

**e. Chronic lymphatic leukemia**

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

- a. Uterine rupture

**b. Placenta praevia**

- c. Premature birth
- d. Low-lying placenta
- e. Placental abruption

338. A 56-year-old patient with diffuse toxic goiter has ciliary arrhythmia, heart rate is 110-120/min., arterial hypertension, BP is 165/90 mm Hg. What drug besides Mercazolil (Thiamazole) should be

prescribed in this case?

a. Propranolol

b. Novocainamide (procainamide)

c. Verapamil

d. Radioactive iodine

e. Corinfar

339. A 52-year-old man complains of periodic palpitation attacks that last 3-8 minutes and then stop on their own. Follow-up examinations and ECG detected no rhythm disturbances. What special method of diagnosing rhythm disturbances must be performed first in this case?

a. Holter ECG monitoring

b. Spirography

c. Transesophageal electric stimulation of the heart

d. Bicycle ergometry

e. Treadmill exercise stress test

340. A 34-year-old multipara was brought to the labor ward with regular labor activity. Her pelvic size is 26-29-32-22 cm. Vaginal examination shows 6 cm cervical dilation, the amniotic sac is unbroken. The fetus is in the breech presentation, with buttocks pressed to the entrance into the lesser pelvis. The promontory cannot be reached, no exostoses. Fetal heart rate is 140/min., expected fetal weight is 2800 g. What labor tactics should be chosen?

a. Fetal extraction from the pelvic end

b. Urgent cesarean section

c. Classic combined external-internal version of the fetus

d. External obstetric version of the fetus

e. Delivery through the natural birth canal

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

a. Feeding on schedule

b. Stop breastfeeding when fissures appear

c. Feeding no longer than 10 minutes through an overlay

d. Feeding on demand, expression of breast milk, prevention of nipple fissures

e. Constant expression of breast milk

342. On the second day after a thyroidectomy, the patient presents with seizures, "numbness" and sensation of "crawling ants" in her hands and feet, and positive Chvostek and Trousseau signs. What complication has developed in the patient?

a. Residual manifestations of thyrotoxicosis

b. Thyrotoxic crisis (thyroid storm)

c. Hypothyroidism

d. Hypoparathyroidism

e. Laryngeal nerve injury

343. 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 abdominal pains, constipations, pain in the hepatic area. In the laboratory analysis of urine: aminolevulinic acid and coproporphyrin are detected. In the laboratory analysis of blood: reticulocytosis, low hemoglobin level. Such intoxication is caused by:

a. Carbon monoxide

b. Zinc

c. Nitric oxide

d. Lead and lead salts

e. Tin

344. A 48-year-old woman has thermal burns of both hands. The epidermis of the palms and backs of her hands is exfoliating, and blisters filled with serous liquid are forming. The forearms are intact.

What diagnosis is most likely?

a. 2-3A degree thermal burn

b. 1-2 degree thermal burn

c. 4 degree thermal burn

d. 1 degree thermal burn

e. 3B degree thermal burn

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

a. Adenoviral conjunctivitis of the right eye

b. Tuberculous conjunctivitis of the right eye

c. Bacterial conjunctivitis of the right eye

d. Herpetic conjunctivitis of the right eye

e. Allergic conjunctivitis of the right eye

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

a. X-ray in the Trendelenburg position

b. Investigation of gastric secretion

c. Clinical blood analysis

d. Esophagoduodenoscopy with biopsy

e. X-ray of the gastrointestinal tract

347. A pregnant woman at 35 weeks of gestation has moderate preeclampsia. A decrease down to 3 points is detected in the biophysical profile of the fetus. Dopplerometry reveals a reversal of the umbilical arterial flow. What would be the further tactics of the attending doctor in this case?

a. Treatment of placental insufficiency with follow-up dopplerometry

b. Waiting tactics

c. Premature delivery via caesarean section

d. Induction of labor by inserting a balloon device

e. Cordocentesis

348. A 5-year-old child had acute onset of the disease that manifested in body temperature up to  $39.5^{\circ}\text{C}$ , marked chills, weakness, inertness, skin pallor, and headache. 8 hours later a hemorrhagic rash developed on the skin of the buttocks and legs. The child is sluggish, the body temperature has dropped, blood pressure is 80/40 mm Hg, respirations are 28-30/min., diuresis is decreased. Make the provisional diagnosis:

a. Reye syndrome

b. Measles

c. Hemorrhagic vasculitis (Henoch-Schonlein purpura)

d. Thrombocytopenic purpura

e. Meningococemia

349. In an 8-year-old child, the disease began with a fever of  $38.7^{\circ}\text{C}$ , profuse nasal discharge and wet cough. Examination detects the following: the oropharyngeal mucosa is moderately hyperemic; anterior arches of the soft palate, palatine tonsils, and eyelids are edematous; membranous conjunctivitis is observed on the left; submandibular, cervical, axillary lymph nodes are 0.7x0.7 cm in size and painless; hepatosplenomegaly is observed. What is the most likely diagnosis in this case?

a. Diphtheria

b. Infectious mononucleosis

c. Influenza

d. Parainfluenza

e. Adenovirus infection

350. A 28-year-old woman complains of headache, general weakness, elevated body temperature,

impaired nasal breathing, and purulent discharge from her left nostril. Anterior rhinoscopy detects hyperemia and edema of the nasal mucosa on the left and pus in the middle nasal meatus. What is the most likely diagnosis in this case?

- a. Diphtheria
- b. Acute rhinitis
- c. Maxillary sinusitis**
- d. Posterior ethmoiditis
- e. Sphenoiditis

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

- a. Diuretics
- b. ACE inhibitors
- c. Long-acting nitrates
- d. Calcium antagonists
- e. beta-blockers**

352. A 9-year-old boy fell off a tree and hit the back of his head. A brief loss of consciousness was observed. The child's condition is satisfactory, he has a headache and vertigo. Skull X-ray scans show a depressed fracture of the occipital bone in the area of the external occipital protuberance. What treatment tactics is indicated for this patient?

- a. Anti-inflammatory therapy
- b. Lumbar puncture to relieve the pressure
- c. Hemostatic therapy
- d. Complex conservative treatment
- e. Surgical intervention**

353. A 14-year-old boy complains of fatigability, face edema, headache, and urination in small portions. The urine resembles meat slops in color. The boy is registered for regular check-ups since the age of 8 because of chronic glomerulonephritis. His blood creatinine is 0.350 mmol/L, blood urea - 10.4 mmol/L. What complication is the most likely cause of this clinical presentation?

- a. Chronic circulatory failure
- b. Renal tuberculosis
- c. Acute renal failure
- d. Chronic glomerulonephritis
- e. Chronic renal failure**

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

- a. Sulfanilamides
- b. Macrolides
- c. Aminoglycosides
- d. Second or third generation cephalosporins
- e. Penicillin antibiotics**

355. On the 10th day after giving birth a woman came to a doctor complaining of high temperature of 38°C and sudden pain, hyperemia, and an induration in her left breast. Objectively, the skin of her left mammary gland has local hyperemia in its upper outer quadrant. During its palpation the pain intensifies. What is the most likely diagnosis in this case?

- a. Fibroadenoma of the left breast
- b. Cyst of the left breast with suppuration
- c. Left breast cancer
- d. Breast hemangioma
- e. Lactational mastitis**

356. A 6-year-old girl complains of body temperature up to 39°C, rhinitis, dry cough, dyspnea. She



has been presenting with these signs for 5 days already. On examination her condition is of moderate severity. Her dyspnea is of mixed genesis. Respirations are 28/min., pulse is 120/min. Percussion produces a dull sound in the right lower segments; in the same area auscultation detects weakened respiration and fine vesicular wet crackles; coarse respiration can be detected on the left. Make the provisional diagnosis:

- a. Stenosing laryngotracheitis
- b. Acute obstructive bronchitis
- c. Right-sided community-acquired pneumonia**
- d. Acute simple bronchitis
- e. Acute bronchiolitis

357. A full-term delivery has resulted in the birth of a live full-term girl without asphyxia. Objectively, the baby is inert, her skin is pale with an icteric tinge, she has no edemas. The abdomen is soft, the liver and spleen are enlarged. Blood tests show that the mother's blood type is A(II) Rh(-), while the child's blood type is A(II) Rh(+). Make the diagnosis:

- a. Intracranial birth injury
- b. Hemolytic disease of the newborn**
- c. Disturbed cerebral circulation
- d. Maldevelopment of parenchymal organs
- e. Physiological jaundice

358. After playing with "mosaics", a 2-year-old child suddenly developed cough, stridorous respirations, urges to vomit, and cyanosis against the background of relative somatic health. What should the doctor suspect first when examining this child?

- a. Pneumonia
- b. Pertussis
- c. Foreign body aspiration**
- d. Acute laryngotracheitis
- e. Acute obstructive bronchitis

359. A child with chronic carditis, heart failure class IIA, who is being treated with digoxin, developed increasing bradycardia, nausea, vomiting, dizziness, and disturbed sleep. ECG shows an extrasystole, PQ is 0.18. What is the most likely cause of this condition?

- a. Acute intestinal infection
- b. Pulmonary edema
- c. Overdose or intolerance of cardiac glycosides**
- d. First-degree atrioventricular block
- e. Hypokalemia

360. A 5-year-old child became acutely ill with the fever of  $39.2^{\circ}\text{C}$ , one episode of vomiting, complaints of cramping pain in the abdomen, tenesmus, and frequent bowel movements that produce a small amount of feces and a large amount of mucus with pus and blood streaks. Examination detects a dense sigmoid colon that is painful to palpation. Make the diagnosis.

- a. Rotavirus infection
- b. Salmonellosis
- c. Acute appendicitis
- d. Cholera
- e. Shigellosis**

361. During meat testing Trichinella was detected in diaphragm crura in one of the two muscular tissue samples. What tactics should a doctor choose regarding this meat?

- a. Technological disposal**
- b. Freezing under  $-12^{\circ}\text{C}$
- c. Incineration
- d. Boiling under 1,5 atmosphere
- e. Preservation in 10% salt solution

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

- a. Parametric Student's criterion

b. Nonparametric Kolmogorov-Smirnov criterion

c. Correlation coefficient

d. Odds ratio

e. Relative risk

363. A 26-year-old woman presents with amenorrhea. 10 months ago she gave birth for a second time. In her early postpartum period she developed a massive hypotonic hemorrhage. No breastfeeding. Lately she has been presenting with loss of weight, loss of hair, and indisposition. Gynecological examination revealed atrophy of the external genitals, the uterus is abnormally small, no uterine appendages can be detected. What is the most likely diagnosis?

a. Galactorrhea-amenorrhea syndrome

b. Sheehan syndrome (postpartum pituitary gland necrosis)

c. Physiological amenorrhea

d. Stein-Leventhal syndrome (polycystic ovary syndrome)

e. Suspected progressing ectopic pregnancy

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

a. Pedicle torsion of an ovarian cyst

b. Ovarian apoplexy

c. Exacerbation of chronic right-sided adnexitis

d. Acute appendicitis

e. Ectopic pregnancy

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

a. Erysipelas, hemorrhagic form

b. Phlegmon of the calf

c. Herpes infection

d. Anthrax, cutaneous form

e. Chickenpox

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

a. Secondary neuroendocrine obesity

b. Secondary endocrine hypo-ovarian obesity

c. Primary alimentary constitutive obesity, gynoid type

d. Primary alimentary constitutive obesity, android type

e. Secondary hypothalamic obesity

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

a. Bronchial asthma

b. Focal pneumonia

c. Acute lung abscess

d. Acute bronchitis

e. Pleural empyema

368. The director of a medical facility draws up a financial plan for the next year. To improve the economic well-being of his establishment, he decided to increase the amount of medical services provided. How will it change the fixed cost per unit of service?

a. No changes

b. Increase

c. There is no correlation between these variables

d. Decrease

e. Fluctuate

369. A 28-year-old woman came to a gynecologist with complaints of infertility for the last 3 years. Her menstrual function is normal. She has a history of one artificial abortion and chronic salpingo-oophoritis. She uses no contraception. The spermogram of her husband is normal. What method should be used first to determine the cause of this woman's infertility?

a. Laparoscopy

b. Diagnostic uterine curettage

c. Hysteroscopy

d. Hormone testing

e. Hysterosalpingography

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

a. Esophageal carcinoma

b. Esophageal polyp

c. Esophageal diverticulum

d. Hiatal hernia

e. Varicose veins of the esophagus

371. A 2-month-old girl is being transferred to formula feeding. She was born with the body weight of 3500 g. Currently, her body weight is 3900 g. What is the normal daily volume of feeding for this baby?

a. 730 mL

b. 690 mL

c. 600 mL

d. 750 mL

e. 650 mL

372. On the third day after the primary surgical debridement of a gunshot wound in the soft tissues of the thigh, the patient's condition suddenly became worse. The patient complains of bursting pain in the wound that has been intensifying for the last 5 hours. The edema of the skin and subcutaneous tissue increases rapidly. The edges of the wound are gaping. The muscles that the day before were viable now resemble "boiled meat", protrude into the wound, are dull-colored, have a dirty-gray coating, and fall apart when grasped with tweezers. What type of infection has developed in the thigh wound?

a. Purulent wound infection

b. Anaerobic infection

c. Aerobic Gram-negative wound infection

d. Erysipelas

e. Wound diphtheria

373. A 35-year-old woman complains of high body temperature and pain in the upper outer quadrant of her right buttock, which developed after an injection. She has been presenting with this condition for 3 days. At the site of injection the skin is hyperemic; there is a painful infiltrate with an area of softening in its center. The woman is diagnosed with a postinjection abscess of the right buttock. What tactics should the surgeon choose in this case?

a. Antipyretic agents, massage, and application of dry heat to the right buttock

b. 10-15 minutes of low-intensity laser radiation directed at the right buttock

c. Abscess incision, sanation and drainage of the cavity

d. Abscess puncture, pus removal followed by application of antiseptics

e. Hospitalization, prescription of antibiotics, UHF

374. A 42-year-old man was hospitalized with complaints of shortness of breath, weakness, and constricting and burning chest pain that radiates into the left shoulder and left scapula. The pain syndrome occurred for the first time in his life after emotional and physical stress and lasts approximately 2 hours already; it slightly decreased, but did not disappear even after repeated sublingual administration of nitroglycerin and aspirin in the dose of 325 mg. Provisional diagnosis: acute coronary syndrome without ST elevation. Objectively, blood pressure - 110/70 mm Hg, pulse - 98/min., rhythmic. Heart sounds are weakened, no murmurs. ECG shows ST segment depression and a negative T wave in leads I, aVL, V3-V6. What is the most likely diagnosis in this case?

a. First episode of angina pectoris

b. Unstable angina pectoris

c. Non-Q-wave inferior myocardial infarction

d. Non-Q-wave anterolateral myocardial infarction

e. Acute coronary syndrome with ST elevation

375. A 45-year-old man complains of painless nodules that appeared on the skin of his limbs and on the small of his back. The nodules have a tendency to grow peripherally and merge together. The disease onset was 2 years ago. Exacerbations occur mostly in spring. His family history states that his father had a similar skin condition. Objectively, the pathologic elements manifest as drop-shaped and coin-shaped nodules and plaques, covered in white scales. Make the provisional diagnosis:

a. Pityriasis rosea

b. Psoriasis

c. Lichen ruber planus

d. Atopic dermatitis

e. Seborrheic eczema

376. A 25-year-old woman complains of fever of  $37^{\circ}\text{C}$ , pain in her lower abdomen, and vaginal discharge. Three days ago, at 10 weeks of pregnancy, an artificial abortion was performed. Objectively, the cervix is clean, the uterus is slightly enlarged and painful. The uterine appendages cannot be detected. The fornices are deep and painless. Sanguinopurulent discharge is being produced from the vagina. Make the diagnosis:

a. Pelvioperitonitis

b. Parametritis

c. Postabortion metroendometritis

d. Hematometra

e. Uterine perforation after an abortion

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

a. Oseltamivir

b. Acyclovir

c. Rimantadine

d. Interferon

e. Ceftriaxone

378. A 2-year-old girl has a medical history of recurrent obstructive pneumonia. In the lungs various moist and dry crackles can be auscultated, breath sounds are diminished. Sputum is thick, viscous and difficult to expectorate. Drumstick fingers and physical developmental retardation are observed. What preliminary diagnosis can be made?

a. Pulmonary tuberculosis

b. Bronchial asthma

c. Recurrent bronchitis

d. Pulmonary mucoviscidosis

e. Congenital polycystic lungs

379. A 62-year-old patient has been hospitalized with complaints of pain in the thorax on the right during breathing, dyspnea, dry cough. Ten days ago he slipped and fell hitting his right side. On

examination: the patient lies on the left side. The right side of the thorax lags during breathing. On the right there are crepitation and pain in the III-IV ribs. Dullness of percussion sound and sharply diminished breath sounds can be observed. On X-ray: signs of exudate, fracture of the III-IV ribs. On pleurocentesis: blood is detected. Choose the further tactics:

- a. Recurrent pleurocentesis
- b. Fixed bandage of the rib cage
- c. Refer to a traumatologist
- d. Prescribe conservative therapy
- e. Transfer to a thoracic surgery department**

380. A 14-year-old girl complains of vaginal bleeding that lasts for 10 days and occurred after a three-month delay of menstruation. She had menarche at the age of 13, her menstrual cycle is irregular. Complete blood count detects hemoglobin levels of 90 g/L. What is the most likely diagnosis in this case?

- a. Juvenile uterine bleeding**
- b. Werlhof's disease
- c. Cervical polyp
- d. Hormone-producing uterine tumor
- e. Uterine malformation

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

- a. Aminopenicillins
- b. First generation cephalosporins
- c. Antifungal agents
- d. Second generation macrolides**
- e. Aminoglycosides

382. Children from a certain township present with brittle teeth, malocclusion, dental enamel erosions, and dental pigmentation that looks like yellow-brown spots. What is the likely cause of this presentation?

- a. Low levels of fluorine in water
- b. High levels of fluorine in water**
- c. Low levels of sulfates in water
- d. High levels of nitrates
- e. High levels of sulfates in water

383. A 45-year-old man with a normal body weight was diagnosed with diabetes mellitus for the first time. Attempts to correct his blood glucose levels by means of a diet were unsuccessful. His 24-hour glycemia varies between 10 and 15 mmol/L. Which medicine would be optimal in this case?

- a. Insulin combined with sulfanilamide hypoglycemic drugs
- b. Insulin
- c. Sulfanilamide hypoglycemic drugs**
- d. Biguanides
- e. Biguanides combined with sulfanilamide hypoglycemic drugs

384. To assess the health of the population in the analyzed district, such parameters as birth rate, mortality, population natural increase, prevalence of diseases and primary morbidity, general disability and disability rate among of the population were calculated. What type of statistical values are they?

- a. Correlational
- b. Extensive
- c. Visualization-oriented
- d. Standardized
- e. Intensive**

385. A 38-year-old man complains of an ulcer that appeared in the area of the head of his penis one week ago. The patient observes no subjective sensations in the ulcer. Objectively, there is an erosion 1 cm in diameter in the area of the head of the penis. Slight lamellar compaction is observed in the ulcer. There are no noticeable inflammatory phenomena. The ulcer has smooth edges and the color of "raw meat". What is the most likely diagnosis in this case?

- a. Leishmaniasis
- b. Scabies
- c. Trichomoniasis
- d. Genital herpes

**e. Primary syphilis**

386. A 35-year-old pregnant woman with degree 1 essential hypertension, developed edemas and headache at the 33 week of her pregnancy. Objectively her general condition is satisfactory, blood pressure - 160/100 mm Hg, normal uterine tone. Fetal heart rate is 140/min., rhythmic. She was diagnosed with daily proteinuria - 4 g/L, daily diuresis - 1100 mL. Creatinine - 80  $\mu$ mol/L, urea - 7 mmol/L, platelets -  $100 \cdot 10^9/L$ . What complication of pregnancy occurred?

**a. Hypertensive crisis**

**b. Moderate preeclampsia**

- c. Severe preeclampsia
- d. Renal failure
- e. Mild preeclampsia

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

- a. Malignant renal tumor
- b. Renal tuberculosis

**c. Renal calculus**

- d. Benign renal tumor
- e. Renal cyst

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

**a. Chronic specific**

**b. Chronic nonspecific**

- c. Acute nonspecific
- d. Selective
- e. Acute specific

389. For a month a 60-year-old man had short-term episodes of decreased strength in his limbs on the left. Later, after waking up in the morning, he developed a persistent weakness in his extremities. Objectively, his blood pressure is 140/90 mm Hg. He is conscious and has central paresis of VII and XII pairs of cranial nerves on the left. On the same side, he presents with central hemiparesis and hemihyperesthesia. What group of drugs should be chosen for the differentiated treatment of this patient?

- a. Hemostatics
- b. Corticosteroids
- c. Diuretics

**d. Anticoagulants**

**e. Hypotensive agents**

390. A 36-year-old woman complains of a headache, paresthesia, muscle weakness, spasms, thirst, and polyuria. Objectively, her temperature is  $36.6^{\circ}C$ , respiration rate - 18/min., pulse - 92/min., blood pressure - 180/110 mm Hg. Her ECG shows ST depression. Her potassium levels in blood plasma are low, sodium levels are high, plasma renin activity is significantly decreased, aldosterone concentration is high. 24-hour urine specific gravity does not exceed 1.008-1.011, alkaline reaction is observed. Spironolactone test is positive. CT scan shows enlarged right adrenal gland. What is the most likely diagnosis in this case?

- a. Pheochromocytoma
- b. Cushing's syndrome
- c. Diabetes insipidus
- d. Androsteroma



**e. Conn's syndrome**

391. Examination of a person with internal bleeding who was injured in a road accident detects the following hemodynamic parameters: heart rate -120/min., blood pressure - 80/50 mm Hg. What is the degree of hemorrhagic shock in this person according to the Allgower shock index?

- a. IV degree
- b. III degree
- c. The values are within the normal range

**d. II degree**

- e. I degree

392. After an overexposure to cold, a 32-year-old man developed general weakness, excessive sweating, fever, and cough. Objectively, his overall condition is moderately severe, his skin is moist, his lips are cyanotic. His chest is symmetrically involved in the act of breathing. Under the shoulder blade on the right, the percussion sound is slightly dull; vesicular respiration there is weakened, with sonorous moist finely-vesicular crackles. Above the rest of the lung surface there is harsh breathing with scattered dry crackles. The heart sounds are intensified, the second heart sound is accentuated over the pulmonary artery. In the blood: leukocytes -  $13.2 \cdot 10^9/L$ , ESR - 21 mm/hour. Make the diagnosis:

- a. Exacerbation of chronic non-obstructive bronchitis
- b. Tuberculosis
- c. Acute bronchitis
- d. Lung cancer

**e. Right-sided focal pneumonia**

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

- a. Hallucinoses
- b. Paranoid syndrome
- c. Amentive syndrome

**d. Delirious syndrome**

- e. Oneiroid syndrome

394. A full term baby born from the 1st uncomplicated pregnancy with complicated labor was diagnosed with cephalohematoma. On the 2nd day of life the child developed jaundice; on the 3rd day of life there appeared neurological changes: nystagmus, Graefe syndrome. Urine is yellow, feces are golden-yellow. The mother's blood group is A (II) Rh<sup>-</sup>, the child's - A (II) Rh<sup>+</sup>. On the 3rd day the results of the child's blood test are as follows: Hb- 200 g/l, erythrocytes -  $6,1 \cdot 10^{12}/l$ , blood bilirubin - 58  $\mu\text{mol/l}$  due to the presence of its unconjugated fraction, Ht- 0,57. In this case the jaundice is caused by:

**a. Craniocerebral birth injury**

- b. Physiologic jaundice
- c. Fetal hepatitis
- d. Atresia of bile passages
- e. Hemolytic disease of newborn

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

- a. Chlorpromazine
- b. Adrenaline
- c. Fentanyl
- d. Atropine

**e. Diazepam**

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

- a. Correlation-regression analysis
- b. Wilcoxon signed-rank test

**c. Standardization**

- d. Dynamic time series analysis
- e. Analysis of average values

397. Examination of a 14-year-old tall boy detected arachnodactyly, pectus carinatum deformity of the chest, kyphoscoliosis, flat feet, valgus deformity of the feet, myopic astigmatism, enophthalmos, mitral valve prolapse, aortic root enlargement, and positive thumb and wrist sign. What is the most likely diagnosis in this case?

- a. Beals syndrome
- b. Ehlers-Danlos syndrome
- c. Trisomy 8
- d. Homocystinuria

**e. Marfan syndrome**

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

- a. Salmonellosis
- b. Staphylococcal intoxication
- c. Mushroom poisoning
- d. Fish poisoning

**e. Botulism**

399. 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  $40^{\circ}\text{C}$ ; 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. Albuminocytological dissociation
- b. Xanthochromia in the cerebrospinal fluid

**c. Neutrophilic pleocytosis**

- d. Blood in the cerebrospinal fluid
- e. Lymphocytic pleocytosis

400. A 45-year-old woman was hospitalized with complaints of periodical severe headaches against the background of elevated blood pressure up to 180/90 mm Hg, muscle weakness, and frequent urination (at night as well). Her anamnesis states that despite combining various antihypertensive drugs and adjusting their dosage her arterial hypertension cannot be corrected with drugs. The patient's blood serum potassium levels are 2.0 mmol/L, blood serum sodium levels are 160.0 mmol/L. Ultrasound imaging detects three-dimensional formations approximately 1.0 cm in diameter in the both adrenal glands. Selective endovascular blood sampling from the suprarenal veins was performed, which revealed significant increase of cortisol and aldosterone levels. Make the diagnosis:

**a. Aldosteroma**

- b. Pheochromocytoma
- c. Cushing's disease
- d. Androsteroma
- e. Cushing's syndrome

401. A 16-year-old adolescent has been hospitalized with complaints of unceasing nasal hemorrhage and unbearable pain in his right elbow joint. Objectively: the large joint is enlarged and deformed, the skin over the joint is hyperemic. Arthropathy signs can be observed in the other joints. Ps- 90/min.

Blood test: erythrocytes -  $3,9 \cdot 10^{12}/l$ , Hb- 130 g/l, color index - 1,0, leukocytes -  $5,6 \cdot 10^9/l$ , platelets -  $220 \cdot 10^9/l$ , ESR- 6 mm/hour. Lee-White coagulation time: start- 24', end- 27'10". What drug would be most efficient in the treatment of this patient?

- a. Vicasol (Menadione)
- b. Concentrated red cells
- c. Calcium chloride

**d. Cryoprecipitate**

- e. Aminocaproic acid

402. A 40-year-old patient presents with cough in the morning with production of mucopurulent sputum and elevated body temperature up to  $37.6^{\circ}\text{C}$ . He has been smoking since he was 17 years old. Objectively, auscultation detects coarse respirations and diffuse dry crackles in the lungs. Complete blood count: leukocytes -  $12 \cdot 10^9/L$ , ESR - 19 mm/hour. Bronchoscopy shows purulent catarrhal endobronchitis. Make the diagnosis:

- a. Pulmonary tuberculosis
- b. Bronchial asthma
- c. Lung cancer
- d. Community-acquired pneumonia

**e. Chronic bronchitis**

403. A 53-year-old woman complains of nausea, vomiting bile, and acute pain in the right hypochondrium. The pain occurred 2 hours after a dinner. According to the patient's history, the symptoms appeared 18 hours ago. Objectively, the patient is agitated and fidgets in the bed, pulse - 98/min, the tongue is moist and coated with white deposits. Body temperature -  $38.2^{\circ}\text{C}$ . Palpation detects that the right half of the chest lags behind in the act of breathing, muscle tension and tenderness can be observed in the right hypochondrium. Phrenicus symptom and Grekov-Ortner sign are positive. Signs of peritoneal irritation are negative. What is the most likely diagnosis in this case?

- a. Perforated stomach ulcer

**b. Acute cholecystitis**

- c. Intestinal obstruction
- d. Acute appendicitis
- e. Acute pancreatitis

404. Laboratory quality control of drinking water from the tap had the following results: turbidity -  $1.5 \text{ mg}/\text{m}^3$ , odor - 3 points, taste - 2 points, metallic, color - light yellow, chromaticity -  $20^{\circ}$ , temperature -  $12^{\circ}\text{C}$ . What parameter does not meet the hygienic requirements?

- a. Chromaticity
- b. Temperature

**c. Odor**

- d. Taste
- e. Turbidity

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

- a. Pulmonary artery stenosis
- b. Atrial septal defect
- c. Ventricular septal defect
- d. Coarctation of the aorta

**e. Patent ductus arteriosus**

406. A 1.5-month-old girl, who was born prematurely and is being breastfed, was brought to a pediatrician. What daily dose of vitamin D should the doctor prescribe for the prevention of rickets in this child?

- a. 400 IU
- b. 1 000 IU**

- c. 800 IU
- d. 4 000 IU
- e. 500 IU

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

- a. Anti-HBc IgM
- b. Anti-HAV IgM
- c. Anti-HBs
- d. Anti-HEV IgM
- e. Anti-CMV IgM

408. A 47-year-old man developed the signs of decompensated laryngeal stenosis against the background of acute flegmonous laryngitis. He presents with inspiratory dyspnea at rest, forced position, cyanotic skin covered in cold sweat, tachycardia, deficient pulse, and low blood pressure. What urgent treatment tactics should be chosen?

- a. Oral administration of hyposensitization substances and broncholytics
- b. Administration of glucocorticoid hormones

c. Tracheostomy

- d. Intravenous administration of dehydrating agents
- e. Oxygen therapy

409. A 35-year-old woman had acute onset of the disease that started with fever up to  $39.0^{\circ}\text{C}$  and cough. 3 days later her dyspnea at rest increased up to 35/min. Downward from her right shoulder-blade angle, percussion detects a dull sound. No vocal fremitus, respiratory sounds cannot be auscultated. What is the treatment tactics?

- a. Artificial lung ventilation

b. Pleural tap

- c. Antibiotic therapy
- d. Physiotherapy
- e. Oxygen therapy

410. A 40-year-old man complains of a rash all over his body and slight itching. He has been ill for 3 months and associates his rash with a neuropsychiatric trauma. Objectively, he has multiple pink papules covered with silvery scales on the skin of his torso, scalp, and extensor surfaces of the limbs. What will be the provisional diagnosis in this case?

- a. Pityriasis rosea Gibert
- b. Papular syphilide
- c. Lichen ruber planus

d. Disseminated psoriasis

- e. Seborrheic dermatitis

411. A 63-year-old woman has undergone a surgery for a large multinodular euthyroid goiter. With technical difficulties, a subtotal resection of both lobes of the thyroid gland was performed. On the fourth day after the surgery, the patient developed abdominal pain and muscle spasms in her face and arms. Chvostek and Trousseau signs are positive. What is the most likely cause of the patient's condition?

- a. Tracheomalacia

b. Hypoparathyroidism

- c. Postoperative hypothyroidism
- d. Thyrotoxic crisis
- e. Damage to the recurrent laryngeal nerve

412. In a pediatric clinic, located in a rural area, there are 9 children, who simultaneously fell ill. The following signs were detected: low physical activity, acrocyanosis of the nasolabial triangle and fingertips, mucosal cyanosis, tachycardia, dyspnea. It was determined that all the sick children were fed with a formula that was dissolved in the water taken from a dug well. Laboratory analysis revealed high levels of methemoglobin in the blood of the children. These signs can be caused by increased content of a certain element in the water. Name this element:

- a. Lead
- b. Sulfates
- c. Selenium

d. Nitrates

- e. Methylmercury

413. A 39-year-old man undergoes treatment in the surgical department for acute cholecystitis. He was transferred to the therapy department due to an increase in blood pressure to 180/120 mm Hg, protein excretion with urine, and persistent fever. This persistent subfebrile body temperature was resistant to antibiotic therapy. 10 days after the treatment, the patient had an asphyxia attack with difficult expiration. Later, he developed arthralgias and erythematous skin lesions. Eosinophil levels in the blood are 18%. What disease can be suspected in this patient?

a. Polyarteritis nodosa

- b. Acute glomerulonephritis
- c. Nonspecific aortoarteritis
- d. Systemic lupus erythematosus
- e. Hemorrhagic vasculitis (Henoch-Schoenlein purpura)

414. It was determined that within a group of 100 births, given women with risk factors, there were 30 premature births, while among the 100 births, given by women without risk factors, there were 5 premature births. What method of statistical data processing is optimal, if a physician needs to assess the validity of such differences in the compared groups?

- a. Correlation analysis
- b. Calculation of average values
- c. Calculation of relative values
- d. Standardization

e. Student's t-test

415. A 68-year-old woman with congestive heart failure and left ventricular ejection fraction of 40% receives the following pharmacotherapy scheme: ramipril, torasemide, bisoprolol, clopidogrel, and digoxin. During one of her regular examinations, frequent polymorphic ventricular extrasystoles were detected in the patient. What medicine should be removed from her therapy scheme?

a. Torasemide

b. Digoxin

- c. Bisoprolol
- d. Ramipril
- e. Clopidogrel

416. 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 estimated as a:

a. Full-term infant with prenatal growth retardation

- b. Full-term infant with normal body weight
- c. Postmature infant
- d. Immature infant
- e. Premature infant

417. A 45-year-old man was brought by an ambulance into the emergency hospital. He complains of sudden pain in the lumbar area, frequent painful urination, and vomiting. Examination detects pain in the lumbar area, costovertebral angle tenderness, pain on palpation of kidneys and along the ureter on the right. Urine test: proteins, fresh erythrocytes, leukocytes. Make the provisional diagnosis:

a. Urolithiasis, renal colic

- b. Acute renal failure
- c. Polycystic kidney disease
- d. Acute pyelonephritis
- e. Acute glomerulonephritis

418. A 52-year-old woman developed icteric coloring of the skin and mucosa after a pain attack in the right hypochondrium. Abdominal ultrasound detects concrements in the gallbladder and dilation of

the ductus choledochus up to 1.7 cm. The content of the ductus choledochus could not be clearly visualized. What examination method can confirm the diagnosis of choledocholithiasis?

a. Endoscopic retrograde cholangiography

b. Magnetic resonance imaging

c. Scintigraphy

d. Computed tomography

e. Survey abdominal X-ray

419. A 23-year-old woman complains of an increase in body temperature to  $37.4^{\circ}\text{C}$ , a hemorrhagic rash that appeared on her legs, lumbar pain, and red urine. She fell ill 3 days ago after an overexposure to cold. Objectively, her skin is pale, there is a fine symmetrical hemorrhagic rash on the surface of her lower legs and thighs. Heart rate - 90/min., blood pressure - 115/90 mm Hg. The sign of costovertebral angle tenderness (Pasternatski's sign) is mildly positive on both sides. Blood test: leukocytes -  $9.6 \cdot 10^9/\text{L}$ , platelets -  $180 \cdot 10^9/\text{L}$ , ESR - 31 mm/hour. Urinalysis: protein - 0.33 g/L, changed erythrocytes - 3-40 in sight, leukocytes - 5-8 in sight. What is the most likely diagnosis in this case?

a. Acute interstitial nephritis

b. Thrombocytopenic purpura

c. Hemorrhagic vasculitis

d. Systemic lupus erythematosus

e. Polyarteritis nodosa

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

a. Schneck's vertebral anesthesia, transportation into the inpatient department

b. Transportation into the inpatient department in the position lying on the side

c. Analgesia, antishock therapy, transportation into the inpatient department

d. Analgesics intramuscularly, transportation in a sitting position

e. Analgesia, transportation into a hospital on hard stretchers

421. For intensive infusion therapy, a patient with acute respiratory failure underwent subclavian vein catheterization using the Seldinger technique. After administration of 600 mL of the infusion solution, the patient's condition sharply deteriorated, tachypnea increased from 26/min. to 40/min., tidal volume decreased from 400 mL to 250 mL. Auscultation detects sharply weakened respiration on the right. Percussion detects a dull sound. What complication developed in this patient?

a. Acute heart failure

b. Cerebral edema

c. Hydrothorax

d. Pulmonary edema

e. Pulmonary embolism

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

a. Stable angina pectoris, functional class II

b. Prinzmetal angina pectoris

c. Stable angina pectoris, functional class IV

d. Progressive angina pectoris

e. Myocardial infarction

423. A lumbar puncture was performed for a newborn with a suspected intracranial birth injury. Bloody cerebrospinal fluid was obtained. What type of hemorrhage is observed in this case?

a. Supratentorial hemorrhage

b. Epidural hemorrhage

c. Cephalohematoma

d. Subarachnoid hemorrhage

e. Subtentorial hemorrhage

424. A patient is being treated in the tuberculosis clinic. Throughout the last 3 weeks he has been suffering from headaches of increasing intensity. Neurological examination detects nuchal rigidity



without focal signs. Make the provisional diagnosis:

- a. Convexital arachnoiditis
- b. Chorea minor
- c. Brain tumor
- d. Myelitis

**e. Tuberculous meningitis**

425. A 17-year-old girl was hospitalized into the gynecological department with complaints of profuse bloody discharge from her genital tracts and a cramping pain in her lower abdomen. The last menstruation was 10 weeks ago. Objectively, her blood pressure is 100/60 mm Hg, pulse is 90/min.. Vaginal examination shows that the external orifice of the uterine cervix allows inserting one finger. The uterus is painless and enlarged to 6 weeks of pregnancy. The uterine appendages cannot be detected, the fornices are free. Make the diagnosis:

- a. Threatened miscarriage
- b. Imminent miscarriage
- c. Anembryonic pregnancy
- d. Complete miscarriage

**e. Incomplete miscarriage**

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

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

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

- a. Uterine cervix cancer
- b. Chorioepithelioma

**c. Uterine corpus cancer**

- d. Adenomyosis
- e. Hormone-producing ovarian tumor

428. A 17-year-old young man demands a plastic surgery. He thinks that it's impossible to live with such an ugly nose as his. He claims that wherever he is, everyone is laughing at him and mocking him behind his back. He walks with a cap pulled low over his face, turns his face downwards, and pulls up his scarf up to his eyes. Objectively, there are no indications for rhinoplasty - the young man has a nearly classical shape of the nose. What psychopathological condition is it?

**a. Dysmorphomania**

- b. Hypochondriacal neurosis
- c. Capgras syndrome
- d. Intrusive thoughts
- e. Body schema disorder

429. Survey X-ray of the patient's abdominal cavity shows several hemispherical areas of lucency, located above well-defined horizontal levels. What is the cause of such an X-ray presentation?

- a. Meteorism
- b. Perforated ulcer
- c. Cancer of the large intestine

**d. Intestinal obstruction**

e. -

430. A 28-year-old man without the permanent place of residence was hospitalized with the provisional diagnosis of influenza. On day 5 after the onset of the disease, a roseolar petechial rash appeared on his trunk and on the inner surfaces of the limbs. Objectively, the patient presents with

the body temperature of  $40^{\circ}\text{C}$ , euphoria, facial hyperemia, redness of the sclera, tremor of the tongue, tachycardia, splenomegaly, and agitation. What is the most likely diagnosis in this case?

- a. Delirium tremens
- b. Typhoid fever
- c. Measles
- d. Leptospirosis

**e. Epidemic typhus**

431. A 55-year-old woman complains of thyroid gland enlargement that can be observed throughout the last 2 years and a discomfort during swallowing. Objectively, she has signs of hypothyroidism. The thyroid gland on palpation is dense, non-fused with the surrounding tissues and mobile on swallowing. The regional lymph nodes are not enlarged. In the serum there are antithyroid antibodies detected. What is the most likely diagnosis?

**a. Hashimoto's thyroiditis**

- b. Midline cervical cyst
- c. Acute thyroiditis
- d. Thyroid cancer
- e. Endemic goiter

432. A man suffers from urolithiasis and periodically develops hyperoxaluria. What products should be reduced in his diet?

- a. Canned soup
- b. Meat, fish
- c. Fatty foods
- d. Dairy products

**e. Sorrel, spinach, tomatoes**

433. 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. Group B vitamins

**b. Antidepressants**

- c. Nootropics
- d. Anticonvulsants
- e. Antipsychotics

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

**a. Perforated ulcer of the stomach or duodenum**

- b. Tuberculous peritonitis
- c. Strangulated internal abdominal hernia
- d. Appendicular abscess
- e. Intestinal obstruction

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

- a. Maldigestion
- b. Exudative enteropathy
- c. Irritable colon

**d. Malabsorption**

e. Endocrine gland failure

436. A woman complains of weight loss, pain in the lower abdomen, and stools with mucus and blood that occur up to 12 times per 24 hours. Fibrocolonoscopy detects the following in the area of the

sigmoid colon: local pseudopolypous proliferations, flat superficial irregular-shaped ulcerated patches that do not merge together and are covered with mucus and fibrin, and contact bleeding. What is the most likely diagnosis in this case?

a. Nonspecific ulcerative colitis

b. Crohn's disease

c. Intestinal polyposis

d. Irritable bowel syndrome

e. Pseudomembranous colitis

437. A one-month-old child regurgitates every time after being put to bed after a breastfeeding. Pediatrician's examination revealed no pathology in the child's condition. The doctor explained the regurgitations as a result of digestive system built, characteristic for this age, and gave advise, how to take care of the child in this case. What advise is it?

a. Prone position of the baby after feeding

b. Thermal compresses to the stomach

c. Upright position of the baby immediately after feeding

d. Give a pacifier immediately after breastfeeding

e. Abdominal massage

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

a. Erb's palsy

b. Myelitis

c. Kerer's paralysis

d. Thoracic spinal cord injury

e. Klumpke's paralysis

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

a. Termination of the pregnancy after surgical treatment of the valvular defect (mitral commissurotomy)

b. Maintenance of the pregnancy, planned hospitalization during the critical periods, conservative therapy

c. Medically-indicated termination of the pregnancy

d. Maintenance of the pregnancy, surgical treatment of the valvular defect (mitral commissurotomy)

e. Prescription of corticosteroids and immunosuppressants

440. A pregnant woman at 34 weeks of gestation underwent dopplerometry of umbilical circulation, which revealed a reverse diastolic component. Objectively, the height of the uterus is 27 cm above the pubic bone, the head of the fetus is mobile and located above the entrance to the lesser pelvis. Fetal heartbeat is 136/min. Vaginal examination shows that the uterine cervix is closed, its length is 3 cm. What tactics should the obstetrician choose?

a. Labor induction with oxytocin

b. Fetal biophysical profile

c. Ultrasound photometry of the fetus

d. Urgent cesarean section

e. Repeated dopplerometry next day

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

a. Coarctation of the aorta

b. Aortic stenosis

- c. Ventricular septal defect
- d. Atrial septal defect
- e. Patent ductus arteriosus

442. A 55-year-old woman complains of a tumor-like formation that can be palpated in the kidney area on the left, moderate dull pain in her left side, periodical discharge of bright-red blood during urination. Objectively, the patient has lost weight, her skin is pale and dry. Palpation of the abdomen detects an elastic formation in the left renal region. The formation is mobile and painless. Urinalysis detects macrohematuria and atypical cells. Blood Hb is 82 g/L, ESR is 70 mm/hour. What is the most likely pathology, causing this clinical presentation?

**a. Tumor of the left kidney**

- b. Tumor of the left ureter
- c. Chronic pancreatitis
- d. Tumor of the large intestine
- e. Acute pyelonephritis

443. A worker at a workshop that produces car batteries came to a doctor with complaints of nausea, loss of appetite, sharp pain in the abdominal cavity, and constipations. Examination reveals elevated blood pressure, bradycardia, an enlarged liver, pain in the right subcostal region, a grayish-blue stripe on the gums, and gray skin. Complete blood count indicates the presence of erythrocytes with basophilic stippling and reduced hemoglobin levels. Aminolevulinic acid and coproporphyrin can be detected in the patient's urine. What is the most likely provisional diagnosis in this case?

- a. Mercury poisoning
- b. Food poisoning

**c. Lead poisoning**

- d. Aluminum poisoning
- e. Cadmium poisoning

444. A 38-year-old woman complains of weakness, sleepiness, pain in the joints, weight gain despite low appetite, and constipations. She presents with dry and thickened skin, puffy and amimic face, narrowed palpebral fissures, thick tongue, and deep hoarse voice. Her heart sounds are weak, pulse is 56/min. Low levels of free T4 are observed. This patient needs to take the following on a regular basis:

- a. Mercazolil (Thiamazole)
- b. Lithium carbonate

**c. Thyroxine**

- d. Furosemide
- e. Calcium gluconate

445. A 25-year-old man complains of weakness, progressive shortness of breath, and leg edemas. Previously, he was healthy, but recently he has been taking ibuprofen for his sprained ankle ligaments. Objectively, his pulse is 90/min., blood pressure is 180/100 mm Hg. The heart sounds are sonorous. In the lungs, the percussion sound is dull in the lower right segment. The liver is +3 cm. In the blood: Hb - 103 g/L, leukocytes -  $6.7 \cdot 10^9/L$ , platelets -  $236 \cdot 10^9/L$ , urea - 24.6 mmol/L, creatinine - 0.254 mcmol/L,  $Na^+$  - 135 mmol/L,  $K^+$  - 5.6 mmol/L, albumin - 27 g/L. Chest X-ray shows right-sided pleurisy, the heart is normal. What pathological condition is observed in the patient?

- a. Renal tuberculosis
- b. Nephrotic syndrome**
- c. Acute renal failure
- d. Nephritic syndrome
- e. Acute pyelonephritis

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

- a. Vegetative state
- b. Postresuscitation disease**
- c. Coma of unknown origin

- d. Apparent death
- e. Unconsciousness

447. An 18-year-old young woman complains of pain in her lower abdomen, an increase in her body temperature to  $37.5^{\circ}\text{C}$ , and purulent discharge from the genital tracts. Gynecological examination detects the following: the urethra is infiltrated, the cervix is hyperemic and edematous, the discharge is profuse and purulent, the uterus is of normal size and painful to palpation, the appendages on both sides are corded and painful. Bacterioscopy of secretions detected Gram-negative diplococci intracellularly. What disease is observed in the patient?

- a. Bacterial vaginosis
- b. Trichomonas colpitidis
- c. Subacute ascending gonorrhea
- d. Chronic gonorrhea

e. Acute ascending gonorrhea

448. A patient complains of a rash on the trunk and flexor surfaces of the arms and of itching that intensifies in the evening and at night. Objectively, the patient has small (up to 12 mm in diameter) pink papules and vesicles, arranged in pairs, as well as excoriations, on the specified areas of the skin. What is the most likely diagnosis in this case?

- a. Dermatitis
- b. Eczema
- c. Lichen ruber planus

d. Scabies

e. Secondary papular syphilid

449. A 38-year-old man complains of periodical problematic swallowing of both solid and liquid foods that is observed for many months. Sometimes he develops an intense retrosternal pain, especially after hot beverages. Asphyxia attacks are observed at night. He has no weight loss. Objectively, his general condition is satisfactory, the skin is of normal color. Examination detects no changes in the gastrointestinal tract. Chest X-ray shows dilation of the esophagus with air-fluid levels in it. Make the diagnosis:

- a. Gastroesophageal reflux disease
- b. Esophageal cancer

c. Esophageal achalasia

d. Myasthenia

e. Esophageal candidiasis

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

- a. Yersiniosis
- b. Botulism

c. Scombrotoxicosis

d. Aflatoxicosis

e. Methemoglobinemia

451. A 12-year-old girl complains of general weakness, rapid fatigability, and intense periodical pain in her upper abdomen. The pain occurs immediately after eating or 15-20 minutes later. Periodically, she develops pain at night, sour eructation, and vomiting with just eaten food. According to the patient's medical history, she has been suffering from chronic gastritis for the past 3 years. The patient's father has a long history of peptic ulcer disease of the duodenum. Objectively, the patient's skin is pale, the tongue has a white coating, the abdomen is soft and painful in the epigastrium during palpation. Mendel's sign is positive. What is the most likely diagnosis in this case?

- a. Functional dyspepsia
- b. Chronic gastroduodenitis
- c. Crohn's disease

d. Peptic ulcer disease of the stomach

e. Chronic pancreatitis

452. A 42-year-old man complains of weakness, palpitations, nosebleeds, and skin hemorrhages. His condition progressively deteriorates throughout the last month. Objectively, his condition is severe,

he has petechial and spotted hemorrhages on the skin of his limbs and torso, lymph nodes and spleen are not palpable, the pulse is 116/min., the liver is +2 cm. Complete blood count reveals pancytopenia. What disease can be primarily suspected in this case?

- a. Acute agranulocytosis
- b. Hemorrhagic vasculitis
- c. Acute leukemia

d. Hypoplastic anemia

- e. Werlhof disease

453. A 72-year-old woman has been hospitalized with a nosebleed. Within the last 6 years, her blood pressure had spikes up to 180/100 mm Hg. Objectively, her skin is pale, the heart sounds are quite sonorous, the second heart sound is accentuated over the aorta, there is an audible systolic murmur. Blood pressure - 150/80 mm Hg. In the blood: Hb - 92 g/L, erythrocytes -  $2.7 \cdot 10^{12}/L$ . In the urine: specific gravity - 1022, leukocytes - 3-7 in the vision field, erythrocytes - 0-2 in the vision field. What is the most likely cause of hypertension in this case?

a. Aortic atherosclerosis

- b. Chronic pyelonephritis
- c. Essential hypertension
- d. Chronic glomerulonephritis
- e. Coarctation of the aorta

454. Medical examination of the population revealed and registered chronic diseases, various pathological conditions, and abnormalities. What type of morbidity was studied in this case?

a. Pathological morbidity

- b. Prevalence of the disease
- c. Primary morbidity
- d. Morbidity with temporary disability
- e. General morbidity

455. A 38-year-old woman developed a medical condition 7 days after her return from Bangladesh. Periodical elevation of temperature was accompanied by chills and excessive sweating. She was diagnosed with tropical malaria. Next day her condition further deteriorated: body temperature -  $38^{\circ}C$ , inertness, periodical loss of consciousness, generalized seizures, tachycardia, hypotension, and icteric skin. What complication can be suspected in this case?

a. Cerebral coma

- b. Serous meningitis
- c. Purulent meningitis
- d. Acute hepatic failure
- e. Acute heart failure

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

- a. Pathological preliminary period
- b. Normal labor activity
- c. Secondary weakness of labor activity

d. Primary weakness of labor activity

- e. Discoordinated labor activity

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

- a. Tophi
- b. Rheumatoid nodules
- c. Erythema nodosum
- d. Bouchard's nodes

e. Heberden's nodes

458. Examination of a newborn detects the following: the right arm is extended at the elbow joint,



pronated, passively lies along the trunk with the shoulder lowered and the wrist flexed. The muscle tone is reduced, tendon reflexes are absent, finger movements are preserved. Make the provisional diagnosis.

- a. Klumpke paralysis
- b. Osteomyelitis of the humerus
- c. Complete paralysis of the limb

d. Erb-Duchenne palsy

- e. Soft tissue injury of the shoulder

459. A 45-year-old woman is registered for regular check-ups due to Werlhof disease (immune thrombocytopenia). Complete blood count: Hb- 100 g/L, erythrocytes -  $2.8 \cdot 10^{12}/L$ , platelets -  $90.0 \cdot 10^9/L$ , leukocytes -  $8.4 \cdot 10^9/L$ , erythrocyte sedimentation rate - 13 mm/hour. Examination detects a single small hematoma on the anterior surface of the thigh, developed after the patient accidentally stumbled on a table. What treatment tactics should be chosen in this case?

- a. Administer thrombocytic mass, continue the treatment in the hematology unit
- b. Urgent hospitalization into the hematology unit
- c. Urgent hospitalization into the general care unit
- d. Urgently start a hemostatic therapy, followed by a planned hospitalization into the hematology unit
- e. Continue the supervision by the hospital hematologist

460. A 37-year-old man complains of a pain in his lumbar and thoracic spine and limited spinal mobility for the last 5 years. After examination he was diagnosed with central ankylosing spondylitis. This man is likely to be a carrier of the following HLA antigen:

- a. HLA-DR4
- b. HLA-DR20
- c. HLA-B5
- d. HLA-DR8

e. HLA-B27

461. A 2.5-year-old child is ill for the second day. The onset of the disease was associated with the temperature up to  $37.8^{\circ}C$ , a single bout of vomiting, and watery diarrhea up to 5 times per day. During the second day, vomiting occurred twice, body temperature is  $38.0^{\circ}C$ , the child has low appetite, watery diarrhea continues. The treatment of the child should start with the following:

- a. Prescribe loperamide
- b. Prescribe nifuroxazide
- c. Prescribe oral rehydration
- d. Prescribe polymyxin
- e. Prescribe ceftriaxone

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

- a. Diabetic retinopathy
- b. Thrombosis of the central retinal vein
- c. Embolism of the central retinal artery
- d. Hypertensive angiopathy
- e. Hypertensive angioneuropathy

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

- a. Right-sided inguinal lymphadenitis
- b. Right-sided direct inguinal hernia
- c. Right-sided strangulated hernia
- d. Right-sided oblique reducible inguinal hernia
- e. Right-sided hydrocele testis

464. 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. Mode of death
- b. Mechanism of death
- c. Cause of death**
- d. Manner of death
- e. Time of death

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

- a. Hemodialysis**
- b. Antidote therapy
- c. Diuretics
- d. Peritoneal dialysis
- e. Detoxification therapy

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

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

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

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

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

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

469. Thirty minutes after an intramuscular injection of ampicillin, a 35-year-old woman developed sharp weakness, itching of the face and hands, nausea, cough, dyspnea, and chest pain. Objectively, she has cyanosis, edema of the eyelids, face, and neck, and moist skin with a red rash. Pulse - 120/min., blood pressure - 70/20 mm Hg. Her heart sounds are dull. Her respiration is rapid and shallow, with numerous heterogeneous wet crackles. What drug must be administered first, when starting the urgent therapy in this case?

- a. Astmopent (Orciprenaline)
- b. Euphyllin (Theophylline)
- c. Dopamine

d. Prednisolone

**e. Adrenaline**

470. It was found that for every 100 births, women with risk factors had 30 preterm births, while women without risk factors had 5 preterm births. What statistical method of data processing would be optimal for a doctor to use to estimate the validity of differences between the groups that are being compared?

a. Correlation analysis

b. Calculation of average values

**c. Calculation of the Student's criterion**

d. Standardization method

e. Calculation of relative values

471. After a case of purulent otitis a 1-year-old boy has developed pains 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 most likely?

a. Brodie's abscess

b. Acute coxitis

c. Osteosarcoma

d. Intermuscular phlegmon

**e. Acute hematogenous osteomyelitis**

472. A 19-year-old girl complains of moderate itching and hair loss on her head. Objectively, on the skin of her occipital region there is a single round erythematous focus 3 cm in diameter with clear margins. Asbestos-like scales can be observed on the surface of the lesion. The hair in the focus of the lesion is broken off at the length of 6-8 mm. What is the most likely diagnosis?

**a. Microsporia**

b. Scabies

c. Psoriasis

d. Seborrhea

e. Trichophytosis

473. Palpation of the thyroid gland of a 40-year-old woman detects a dense and moderately painful nodule in the left lobe. Ultrasound shows the nodule to have high density, while scintigraphy with <sup>131</sup>I shows it to be a <<cold>> nodule. What study would be the most useful for clarification of the diagnosis in this case?

a. Thyroid-stimulating hormone levels in the blood

**b. Fine needle aspiration biopsy**

c. Thermography

d. Urinary iodine excretion

e. Reflexometry

474. 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. Sheehan syndrome

b. Cushing's syndrome

c. Cushing's disease

d. Mayer-Rokitansky-Kuster-Hauser syndrome

**e. Testicular feminization syndrome**

475. What modern organizational method can provide the patients in the remote settlements with timely access to quality medical aid and such medical services as consulting, diagnostics, and treatment, especially in the situations when time and distance are crucial?

a. Ambulance services

**b. Telemedicine**

c. Mobile communication

d. Air medical services

e. Field medical teams

476. A 58-year-old patient complains of profuse macrohematuria with discharge of shapeless blood clots and stranguria. Macrohematuria was not accompanied by pain and dysuria and first appeared 5

months ago for no apparent reason. After a few days the bleeding stopped on its own. What is the most likely diagnosis in this case?

- a. Renal tumor
- b. Acute cystitis
- c. Bladder diverticulum
- d. Bladder tumor**
- e. Concrement in the bladder

477. An 11-year-old child has been immunized according to the age and calendar schedule. What vaccination must be received by the child at this age?

- a. Against tuberculosis
- b. Against viral hepatitis B
- c. Against poliomyelitis
- d. Against diphtheria and tetanus**
- e. Against pertussis

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

- a. Right-sided tension pneumothorax. Chest X-ray**
- b. Tension cyst of the right lung. Tracheobronchoscopy
- c. Right-sided hemothorax. Survey X-ray of the chest
- d. Airway foreign body. Diagnostic- therapeutic bronchoscopy
- e. Mediastinitis. Survey X-ray of the chest

479. A 13-year-old girl complains of pain in the area of her heart, palpitations, feeling hot, dizziness, weakness. These complaints appeared 2 months ago, the girl lost 4 kg of weight, her performance at school became worse, and she developed sleep problems. Objectively, she is tearful and irritable, presents with finger tremor, increased moisture of her skin, and reduced tissue turgor. Heart rate - 104/min. Palpation detects dense and painless thyroid gland that is enlarged to a third-degree goiter. What is the most likely diagnosis in this case?

- a. Vegetative-vascular dysfunction
- b. Endemic goiter
- c. Rheumatic chorea
- d. Diffuse toxic goiter**
- e. Non-rheumatic carditis

480. The overall condition of a 24-year-old man, who was being treated for meningococemia, took a turn for the worse. Objectively, he has acrocyanosis, anuria, his limbs are cold, his respiration is 30/min., heart rate is 140/min., blood pressure is 40/0 mm Hg. What emergency medical condition did the patient develop?

- a. Anaphylactic shock
- b. Hemolytic-uremic syndrome
- c. Septic shock**
- d. Pulmonary artery thrombosis
- e. Hypovolemic shock

481. A 47-year-old patient became acutely ill 3 days ago. The patient complains of a fever of  $39^{\circ}\text{C}$ , productive cough with yellow-green sputum, shortness of breath, chest pain on the left. Examination detected the respiratory rate of 26/min. and the shortening of the percussion sound and crepitation below the angle of the scapula on the left. SpO<sub>2</sub> is within normal range (96%). What study would be most informative in this case for establishing the final diagnosis?

- a. Bronchoscopy
- b. Microbiological study of sputum
- c. Spirography
- d. Chest X-ray**
- e. Complete blood count

482. A 37-year-old patient complains of throbbing headache in the frontal region, frequent episodes

of nausea, palpitations, and elevated blood pressure of 240/140 mm Hg. According to the patient's medical history, two days ago she experienced an episode of debilitating headache, palpitations, pulsation of blood vessels, dyspnea, and fear of approaching death. At that time, her face became pale and her hands and feet became sweaty. After examination, elevated levels of metanephrines were detected in patient's urine. What is the most likely diagnosis in this case?

- a. Cushing syndrome
- b. Primary hyperaldosteronism
- c. Cushing disease

**d. Pheochromocytoma**

- e. Essential hypertension

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

- a. Cervical cancer
- b. Endometriosis
- c. Hydatidiform mole

**d. Cervical pregnancy**

- e. Cervical erosion

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

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

485. In medical business, the profit of a company must be included in the price of its medical services. What traditional criteria make up the term "price"?

- a. Cost price, profit, taxes**
- b. Gross expenses, use value
- c. Variable costs, cost price
- d. Profitability, income, fixed costs
- e. The sum of all production costs

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

**a. Exchange blood transfusion**

- b. Hemosorption
- c. Administration of phenobarbital
- d. Corticosteroid therapy
- e. Phototherapy

487. During a regular check-up of a 50-year-old woman a tumor was detected in her right mammary gland. The tumor is 5 cm in diameter, dense, without clear margins. The skin over the tumor resembles lemon rind, the nipple is inverted. The lymph node can be palpated in the axillary region. What diagnosis is most likely?

- a. Diffuse mastopathy
- b. Lacteal cyst
- c. Breast lipoma
- d. Mastitis**

**e. Breast cancer**

488. A 60-year-old man complains of dyspnea, paresthesia, vertigo, and fatigability. He has a history of atrophic gastritis. Objectively, his skin and mucosa are pale and icteric. Lingual papillae are smoothed out. The liver and pancreas are not enlarged. Complete blood count shows the following: Hb- 77 g/L, erythrocytes -  $1,65 \cdot 10^9/L$ , color index - 1.4, reticulocytes - 0.2%, leucocytes -  $2.8 \cdot 10^9/L$ ; ESR - 22 mm/hour, macrocyte. What additional test can reveal the cause of anemia?

a. Copper levels

**b. Vitamin B<sub>12</sub> levels**

c. Vitamin D levels

d. Iron levels

e. Calcium levels

489. At night a 2-year-old child with upper respiratory tract infection suddenly developed dyspnea with labored inspiration. Objectively the skin is pale, perioral cyanosis and slight acrocyanosis are observed. Breathing is loud, respiration rate is 32/min. Jugular, supra- and infraclavicular fossae retract during breathing. Respiration is coarse on auscultation. Heart sounds are clear and sonorous, heart rate is 120/min. What condition was complicated by the development of the upper respiratory tract infection?

a. Bronchial asthma

**b. Stenosing laryngotracheitis**

c. Bronchiolitis

d. Obstructive bronchitis

e. Airway foreign body

490. A patient had recurrent attacks of a short-term "disconnect" of consciousness, did not respond when talked to, and was looking straight ahead. What examination method should be prescribed for the patient?

a. Doppler ultrasound

b. Rheoencephalography

**c. Electroencephalography**

d. Lumbar puncture

e. Echoencephalography

491. A person diagnosed with a urogenital chlamydial infection based on the clinical manifestations and laboratory examination data has made an appointment with a venereologist. What will be the main component of the therapy prescribed for this patient?

a. Cycloferon or other immunomodulators

b. Penicillin antibiotics

c. Drugs of the tinidazole group

d. Sulfonamides

**e. Macrolide antibiotics**

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

a. Leukemoid reaction

b. Erythremia (polycythemia vera)

**c. Chronic myeloid leukemia**

d. Chronic lymphocytic leukemia

e. Acute leukemia

493. A 22-year-old woman is agitated, her behavior is abnormal, her consciousness is clouded. She has a history of type 1 diabetes for the last 4 years with the labile course. She receives insulin therapy in the dose of 54 units per 24 hours. Objectively, her skin is moist and cold to the touch, she has hyperreflexia and dilated pupils. Her respiration is vesicular. Blood pressure - 140/90 mm Hg, pulse - 88/min. Blood testing revealed glycemia of 2.3 mmol/L and aglucosuria. What is the most likely diagnosis in this case?



- a. Acute cerebrovascular accident
- b. Hyperosmolar coma
- c. Ketoacidotic coma

**d. Hypoglycemic coma**

- e. Lactacidotic coma

494. A sanitary-epidemiological station at a rural region received an emergency message that a patient diagnosed with typhoid fever was admitted to the infectious diseases department of the central regional hospital. What is the main transmission route of this disease?

- a. Droplet transmission
- b. Household transmission
- c. Arthropod-borne transmission
- d. Food-borne transmission

**e. Water-borne transmission**

495. A 27-year-old patient developed a fever of  $38.7^{\circ}\text{C}$ , lumbar pain, weakness, and headache after an overexposure to cold. Examination detects a positive Pasternacki sign (costovertebral angle tenderness) on the left. General urinalysis detects pyuria and bacteriuria. What is the most likely diagnosis in this case?

- a. Acute cystitis
- b. Paranephric abscess

**c. Acute pyelonephritis**

- d. Renal colic
- e. Acute glomerulonephritis

496. A woman has developed sudden thoracic pain on the right with expectoration of pink sputum and body temperature rise up to  $37.7^{\circ}\text{C}$  on the 4th day after the surgery for cystoma of the right ovary. On lung examination: dullness of the lung sound on the lower right is observed. Isolated moist crackles can be auscultated in the same area. What complication is the most likely?

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

497. After a lengthy march an army regiment has set camp for 3 days near a settlement. Sanitary-hygienic investigation detected several water sources. Choose the source that would satisfy the demands for potable water the most under the given field conditions:

- a. Brook
- b. Artesian well**
- c. Melt water
- d. Rain water
- e. River

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

**a. Measles**

- b. Rubella
- c. Viral hepatitis A
- d. Poliomyelitis
- e. Infectious mononucleosis

499. During preventive ultrasound scan of abdomen performed during regular check-up in a school the following was revealed in an 11-year-old student of the 5th grade: the left kidney is 3 cm below the normal position, its shape, size and structure are within the norm, the contralateral kidney cannot be observed at its proper place. The preliminary diagnosis is as follows: congenital anomaly of renal development, dystopic left kidney, right kidney is absent or pelvic dystopic. What X-ray method would

be required for making the final diagnosis and determining the functional capacity of both kidneys?

a. Thermography

b. Renal dynamic scintigraphy

c. Excretory urography

d. Radionuclide renography

e. Radioimmunoassay

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

a. Hyperesthesia

b. Illusions

c. Synesthesia

d. Paresthesia

e. Cenestopathy

501. After giving birth, a 25-year-old woman developed increased weakness in her legs and unsteady walking. She has been suffering from this condition for 6 years already. Every autumn, she notes a deterioration of her condition. Objectively, the woman is euphoric and exhibits a reduced critical attitude towards her condition. She has horizontal nystagmus, high tendon reflexes, foot clonus, pathological foot reflexes, no abdominal reflexes, ataxia during the Romberg test, and intentional tremor and missing during coordination tests. Temporal pallor of the optic discs is observed on the eye fundus. What is the most likely diagnosis in this case?

a. Myasthenia gravis

b. Acute disseminated encephalomyelitis

c. Dyscirculatory encephalopathy

d. Amyotrophic lateral sclerosis

e. Multiple sclerosis

502. 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. Medical consultative board

b. Physician in charge and the head of the department

c. Sociomedical expert committee

d. Deputy chief physician responsible for disability examination

e. Chief physician of a medical facility

503. A 7-year-old girl has been twice treated with antibacterial agents for urinary tract infection. US shows no severe renal defects. The child presents with recurrence of leukocyturia and bacteriuria, elevated body temperature up to  $38.5^{\circ}\text{C}$ , and pain in her left lumbar area. What examination should be conducted first to clarify the cause of urinary infection recurrence?

a. Micturating cystourethrography

b. Retrograde pyelography

c. Immunogram

d. Excretory urography

e. Radioisotope renography

504. A child was born from the first pregnancy at the gestational age of 38 weeks via caesarean section with the weight of 3500 g. The Apgar score is 8-10 points. What procedure must be carried out for this baby during the first hours of life to prevent hemorrhagic disease of the newborn?

a. Instillation of erythromycin ointment into the conjunctival sac

b. Oral administration of vitamin C

c. Vaccination

d. Intramuscular administration of 1 mg of vitamin K

e. Oral administration of vitamin D

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

- a. Joint panaritium
- b. Tendon panaritium
- c. Bone panaritium
- d. Paronychia

**e. Pandactylitis**

506. A 22-year-old woman at 11-12 weeks of her pregnancy came to a maternity clinic. Examination shows a positive Wasserman reaction. A dermatologist diagnosed her with secondary latent syphilis. What are the tactics of pregnancy management in this case?

- a. Artificial termination of the pregnancy after normalization of the patient's Wasserman reaction
- b. Artificial termination of the pregnancy after the diagnosis is made

**c. Artificial termination of the pregnancy after a course of antisyphilitic therapy**

- d. Three antisyphilitic treatment courses throughout the pregnancy
- e. Prolongation of the pregnancy after a course of antisyphilitic therapy

507. A 2-day-old child was born at week 32 of the pregnancy with the weight of 1700 g. The changes in the respiratory system that appeared 8 hours after birth are increasing. The mother of the child, gravida 3, para 2, had no abortions. The previous child died of respiratory distress syndrome. Objectively, the following is observed: Silverman score - 6 points, respiration with a disturbed rhythm, apnea, sonorous exhalation, reduced muscle tone. Auscultation detects moderately weakened respiration and wet crackles on both sides. X-ray reveals a reticulonodular pattern. What is the cause of respiratory distress syndrome in the child?

- a. Diaphragmatic hernia
- b. Intrauterine pneumonia
- c. Edematous hemorrhagic syndrome

**d. Hyaline membrane syndrome**

- e. Pulmonary atelectasis

508. A 5-year-old girl has been hospitalized with an electrical injury. Objectively, the child's condition is extremely severe, she is unconscious and incapable of unassisted breathing. During cardiopulmonary resuscitation, ECG shows waves of varying shape and amplitude with the rate of 320/min. There is no pulse on the peripheral vessels and central arteries. What first aid must be provided in this case?

**a. Electric defibrillation**

- b. Transfusion of crystalloids 10 mg/kg intravenously
- c. Tracheal intubation
- d. Administration of a lidocaine solution 20 mg intramuscularly
- e. Open cardiac massage

509. A 50-year-old man was hospitalized with complaints of blood in the urine. There are no pain or urination disorders. Hematuria is observed for the last 3 days. Objectively, the kidneys are not palpable, the suprapubic area is normal, the external genitalia have no pathology. Rectal examination detects no prostatic enlargement. Cystoscopy detects no changes. What disease can be suspected first?

**a. Kidney cancer**

- b. Varicocele
- c. Necrotizing papillitis
- d. Tuberculosis of the urinary bladder
- e. Renal dystopia

510. A 63-year-old man complains of unmotivated weakness and pressing and bursting sensation in the left subcostal area. According to him, these signs have been present for a year already. Previously he was healthy. He took part in containment measures during the accident at the Chornobyl Nuclear Power Plant. Objectively: the skin is pale, peripheral lymph nodes are not enlarged, the liver is +3 cm, the spleen is +10 cm. Complete blood count: erythrocytes -  $3.1 \cdot 10^{12}/L$ , Hb- 100 g/L, leukocytes -  $46 \cdot 10^9/L$ , blasts - 2%, promyelocytes - 10%, myelocytes - 18%, band neutrophils - 27%, segmented neutrophils - 10%, lymphocytes - 12%, eosinophils - 6%, basocytes - 3%, monocytes - 2%, erythrocyte sedimentation rate - 20 mm/hour. What is the most likely diagnosis?

- a. Acute leukemia
- b. Chronic lymphatic leukemia

**c. Chronic myeloleukemia**

d. Hemolytic anemia

e. Hepatic cirrhosis

511. An 18-year-old girl complains of sneezing attacks that occur mostly in the morning 15-20 times in a row, an itch in her nose and throat, profuse watery discharge from her nose, rhinitis, and pain in her eyes. What test will be the most informative for diagnosis-making in this case?

a. Provocation test

b. Intradermal test

c. Droplet test

**d. Skin prick test**

e. Total IgE levels

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

a. Second group of disability

b. Capable of working, non-employable

c. First group of disability

d. Third group of disability

**e. Capable of working, employable**

513. A 13-year-old girl for a month has been complaining of fatigability, dull pain in her right subcostal area, abdominal distension, and constipations. Abdominal palpation reveals positive Kehr, Murphy, and Ortner signs, while Desjardins and Mayo-Robson points are painless. Total bilirubin is 14.7  $\mu\text{mol/L}$ , predominantly indirect, ALT- 20 U/L, AST- 40 U/L, amylase - 6.3 mmol/L.

Echocholecystography shows practically no contraction of the gallbladder. Make the provisional diagnosis:

a. Chronic hepatitis

b. Chronic pancreatitis

c. Hyperkinetic biliary dyskinesia

d. Acute pancreatitis

**e. Hypokinetic biliary dyskinesia**

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

a. Phosphate diabetes

b. Dysmetabolic nephropathy

**c. Acute pyelonephritis**

d. Acute glomerulonephritis

e. Deficient care

515. A 27-year-old electrician received an electrical injury, when he touched an exposed electrical wire with his hand, after which he developed circulatory and respiratory arrest. Resuscitation measures restored his cardiac activity after 5 minutes. What complication is possible in a few hours or even days after the electrical injury?

a. Pulmonary edema

**b. Circulatory arrest**

c. Acute liver failure

d. Acute renal failure

e. Respiratory arrest

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

a. Cytomegalovirus infection

- b. Congenital varicella syndrome
- c. Congenital listeriosis
- d. Toxoplasmosis

**e. Congenital rubella syndrome**

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

a. Gangrene of the right lung

**b. Pulmonary abscess**

- c. Pleural empyema
- d. Multiple bronchiectasis
- e. Right-sided bronchitis

518. A woman addressed a gynecologist on the 20th day of puerperal period with complaints of pain in the left mammary gland, purulent discharge from the nipple. Objectively: Ps- 120/min., body temperature is  $39^{\circ}\text{C}$  The left mammary gland is painful, larger than the right one, the skin there is hyperemic; in the upper quadrant there is an infiltrate 10x15 cm in size with soft center. Blood test: ESR- 50 mm/hour, leukocytes -  $15,0 \cdot 10^9/\text{l}$ . What would be the treatment tactics?

a. Refer to a surgeon for conservative treatment

**b. Transfer to a surgical department for surgical treatment**

- c. Refer to a gynecology department
- d. Refer to a postnatal department
- e. Lance the mammary gland abscess in a maternity department

519. A 32-year-old woman addressed a maternity clinic with complaints of infertility that has been lasting for 7 years. Her menstrual cycle occurs in two phases. Hysterosalpingography reveals obstruction of the uterine tubes in the ampullar areas, an adhesive process in the small pelvis can be observed. What treatment is most advisable in this case?

- a. Adnexectomy
- b. Laparotomy
- c. Tubectomy

**d. Laparoscopy**

e. Hydrotubation

520. A 48-year-old woman complains of disturbed menstrual cycle: her periods last for 7-9 days and are excessively profuse throughout the last half-year. She notes occasional hot flashes in her head, insomnia, irritability, and headaches. Her skin is of normal color. Blood pressure - 150/90 mm Hg, pulse - 90/min., rhythmic. The abdomen is soft and painless. Bimanual examination shows no uterine enlargement, the appendages cannot be detected. The vaginal fornices are free. What is the most likely diagnosis?

- a. Premenstrual syndrome
- b. Stein-Leventhal syndrome (polycystic ovary syndrome)
- c. Uterine myoma

**d. Climacteric syndrome**

e. Adrenogenital syndrome

521. A 40-year-old patient has acute onset of disease caused by overexposure to cold. Temperature has increased up to  $39^{\circ}\text{C}$  Foul-smelling sputum is expectorated during coughing. Various moist crackles can be auscultated above the 3rd segment on the right. Blood test: leukocytes -  $15,0 \cdot 10^9/\text{l}$ , stab neutrophils - 12%, ESR- 52 mm/hour. On X-ray: in the 3rd segment on the right there is a focus of shadow 3 cm in diameter, low density, with fuzzy smooth margins and a clearing in its center. What disease is most likely in the given case?

a. Peripheral pulmonary cancer

**b. Pneumonia complicated by an abscess**

- c. Pulmonary cyst
- d. Cystic echinococcosis
- e. Infiltrative tuberculosis

522. A 13-year-old girl came to a school doctor. Two days ago she first developed moderate bloody discharge from her genital tracts. Her secondary sexual characteristics are developed. What is the most likely cause of the bloody discharge in this case?

**a. Menarche**

- b. Hemophilia
- c. Juvenile bleeding
- d. Endometrial cancer
- e. Werlhof's disease

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

- a. Damage to the uterine cervix
- b. Uterine hypotonia
- c. Retained placenta

**d. Uterine atony**

- e. Uterine rupture

524. A 26-year-old woman, who gave birth 7 months ago, has been suffering from nausea, morning sickness, somnolence for the last 2 weeks. The patient breastfeeds; no menstruation. She has been using no means of contraception. What method would be most efficient in clarification of the diagnosis?

- a. Small pelvis radiography
- b. Mirror examination

**c. Ultrasound**

- d. Palpation of mammary glands and squeezing out colostrum
- e. Bimanual abdominovaginal examination

525. To fight against the tobacco smoking, Ukraine has ratified the World Health Organization Framework Convention on Tobacco Control and prohibited public smoking. What type of prevention is it?

- a. Public prevention
- b. Tertiary prevention
- c. Secondary prevention

**d. Primary prevention**

- e. Individual prevention

526. A 57-year-old woman during a regular ultrasound examination presented with a space-occupying heterogeneous lesion in the right kidney. What is the most informative method of renal tumor diagnostics?

- a. Excretory urography
- b. Three glass urine test
- c. Radioisotope renography
- d. Retrograde pyelography

**e. Spiral computed tomography**

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

- a. Edematous
- b. Cephalgic
- c. Crisis
- d. Mixed



**e. Neuropsychic**

528. A 48-year-old farmer was hospitalized with complaints of headache, nausea, wet cough, problematic breathing, impaired vision, excessive sweating, and salivation. He worked in a team that treated gardens with organophosphorus pesticides. In the blood: erythrocytes -  $4.1 \cdot 10^{12}/L$ , Hb - 136 g/L, color index - 0.9, leukocytes -  $13.0 \cdot 10^9/L$ , ESR - 17 mm/hour. He was diagnosed with acute intoxication caused by organophosphorus pesticides. What is the most important diagnostic criterion of this pathology?

- a. Reticulocytosis
- b. Thrombocytopenia
- c. Anemia

**d. Decreased cholinesterase levels**

**e. Leukocytosis**

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

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

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

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

531. A 76-year-old woman complains of a progressive swallowing disorder, predominantly when she eats solid foods. This sign is observed over the past 6 weeks. Sometimes she notes episodes of vomiting with solid vomitus. Swallowing is painless. She has lost 6 kg. Ten years ago she had a myocardial infarction. She permanently takes aspirin and long-acting nitrates, drinks alcohol in moderation, and smokes. Objectively, her skin is icteric, her neck is normal, the lymph nodes are not enlarged. The chest is normal. The cardiovascular system shows no marked changes. The liver is +3 cm. Make the diagnosis:

- a. Diaphragmatic hernia
- b. Myasthenia

**c. Esophageal cancer**

- d. Esophageal achalasia
- e. Diffuse esophageal narrowing

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

**a. Nephrotuberculosis**

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

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

likely diagnosis in this case?

- a. Atresia of the large intestine
- b. Ladd's bands
- c. Atresia of the small intestine
- d. Congenital pyloric stenosis

e. Esophageal atresia

534. During a regular examination, an 8-year-old girl with type I diabetes mellitus presents with a swelling on the anterior surface of her hip. The swelling is 3 cm in diameter, dense, painless on palpation. The skin over this formation has normal color and temperature. Localization of the swelling matches the place where the girl usually receives her insulin injections. What is the most likely cause of this clinical presentation?

a. Development of hypertrophic lipodystrophy

- b. Formation of a post-injection infiltration
- c. Allergic response
- d. Development of atrophic lipodystrophy
- e. Formation of a post-injection abscess

535. A 59-year-old man for a month has been presenting with short-term periodical loss of strength in his limbs on the left. Later he developed a persistent morning weakness in the affected limbs after waking. Objectively, he is conscious and has central paresis of the VII and XII pairs of his cranial nerves on the left. Central hemiparesis and hemihypersthesia are observed on the left side. What are the drugs of choice for treatment of this man?

- a. Hemostatics
- b. Hypotensive agents
- c. Diuretics

d. Anticoagulants

e. Corticosteroids

536. A 22-year-old woman complains of an aching pain in her right iliac region throughout the last week, morning sickness, and taste distortions. Her menstruation is delayed for 3 weeks already. Objectively, her blood pressure is 110/70 mm Hg, pulse - 78/min.,  $t^{\circ}C$  - 37.0 $^{\circ}C$ . Bimanual examination shows that her uterus is slightly enlarged, soft, mobile, and painless. Palpation of the uterine appendages detects on the right a painful and moderately mobile dense-elastic formation 3x4 cm in size. Make the diagnosis:

- a. Interrupted tubal pregnancy
- b. Acute appendicitis
- c. Uterine pregnancy
- d. Cyst of the right ovary

e. Progressing tubal pregnancy

537. 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. Complete blood count: Hb - 108 g/L, thrombocytopenia. Anamnesis states that similar condition was observed 1 year ago. Make the diagnosis:

a. Thrombocytopenic purpura

- b. Ulcerative bleeding
- c. Rectal tumor
- d. Nonspecific ulcerative colitis
- e. Hemophilia

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

a. Ankylosing spondylitis

b. Reactive polyarthritis

c. Gouty arthritis

- d. Rheumatoid polyarthritis
- e. Spinal osteochondrosis

539. Three days ago a 29-year-old patient developed throbbing pain in the rectum, increased body temperature, and general weakness. Palpation detected local soreness in the anal region at 6 o'clock. Digital examination of the rectum revealed a painful infiltrate that reached no higher than the pectinate line. What is the most likely diagnosis in this case?

- a. Acute hemorrhoids
- b. Acute prostatitis
- c. Acute paraproctitis
- d. Rectal tumor
- e. Acute anal fissure

540. During examination of a patient, the doctor detected in him disorders of the eyes (hemeralopia, Bitot's spots), skin and skin appendages, mucosa, and gastrointestinal tract. He was provisionally diagnosed with Prasad's syndrome. What causes the development of this pathology?

- a. Manganese deficiency
- b. Iron deficiency
- c. Copper deficiency
- d. Zinc deficiency
- e. Vanadium deficiency

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

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

542. During medical examination of a group of children under 4 years carried out by a pediatric team in one of the African countries a set of similar pathological signs was detected in some of the children. The signs are as follows: growth inhibition, mental changes, muscle atrophy, swellings, changes in hair and skin pigmentation. These children were diagnosed with kwashiorkor. What food products should be added to the diet to treat this disorder?

- a. Vegetables, fruit
- b. Fish, vegetables, cereals
- c. Milk, meat, vegetables
- d. Poultry, fruit, berries
- e. Cereals, fruit, berries

543. A 29-year-old woman complains of infertility and an irregular menstrual cycle (oligomenorrhea). Examination detected the following: height - 160 cm, body weight - 91 kg, growth of hair on the face and thighs. Bimanual examination revealed enlarged dense ovaries 5x6 cm in size on both sides. Ultrasound confirmed these findings. What is the cause of the woman's complaints?

- a. Ovarian androblastoma
- b. Chronic bilateral adnexitis
- c. Premenstrual syndrome
- d. Adrenogenital syndrome
- e. Sclerocystic ovary syndrome (Stein-Leventhal syndrome)

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

- a. Pulmonary cyst
- b. Pulmonary echinococcosis

**c. Bronchiectasis**

- d. Chronic pleural empyema
- e. Pulmonary gangrene

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

- a. Progesterone blood level
- b. PAPP + hCG levels in blood

**c. Dynamics of hCG levels in blood**

- d. hCG level in blood
- e. Magnetic resonance imaging

546. At the railroad crossing a passenger train collided with a bus. In this collision 26 bus passengers died, another 18 passengers received mechanical injuries of varying severity. Where will be professional medical aid provided for the victims of this accident? Who will provide this aid?

- a. At the site of the accident; specialized second-response emergency teams
- b. At the site of the accident; first-response emergency teams

**c. In medico-prophylactic institutions; general physicians and surgeons**

- d. In medical institutions; all listed types of healthcare workers
- e. In medico-prophylactic institutions; specialized second-response emergency teams

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

- a. Facial cyanosis
- b. Petechial hemorrhages on the skin
- c. Multiple Tardieu spots
- d. Marked livor mortis

**e. Horizontal strangulation mark**

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

- a. Essential hypertension

**b. Chronic pyelonephritis**

- c. Renal urolithiasis
- d. Renal tuberculosis
- e. Chronic glomerulonephritis

549. A woman with the pregnancy term of 8 weeks complains of elevated temperature up to  $37.6^{\circ}\text{C}$ , skin rash that can be characterized as macular exanthema, enlargement of posterior cervical and occipital lymph nodes, small amount of bloody discharge from the genital tracts. She was examined by the infectious diseases specialist and diagnosed with rubella. What tactics should the obstetrician-gynecologist choose?

- a. Prescription of antibacterial therapy

**b. Abortion**

- c. Treatment of incipient abortion
- d. Prescription of hemostatic therapy
- e. Prescription of antiviral therapy

550. A variety of lighting fixtures are used to illuminate classrooms. What kind of lighting fixtures creates the most hygienically acceptable lighting?

a. Lighting fixtures that provide semi- reflected lighting

**b. Lighting fixtures that provide reflected lighting**

c. Lighting fixtures that provide direct lighting

d. Lighting fixtures that provide scattered lighting

e. Lighting fixtures that provide combined lighting

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

a. Calcium antagonists

b. Long-acting nitrates

**c. Beta blockers**

d. Antiplatelet drugs

e. Angioprotectors

552. A region attended by a central regional hospital demonstrates increased hemorrhagic stroke morbidity. Essential hypertension morbidity, however, remains at the same level and is below the average level registered within the larger area. What managerial decision should be made in this case?

a. To design and implement measures for secondary prevention of hypertension complications

b. To design and implement measures for professional development of medical workers

**c. To design and implement measures for early diagnostics of arterial hypertension**

d. To design and implement measures for primary prevention of essential hypertension

e. To design and implement improved dispensary system for hypertensive patients

553. A man complains of a headache, problematic breathing through the nose, and purulent discharge from the nose that are observed for the last 3 months. Four months ago he underwent a treatment of his upper right premolar. X-ray shows a shadow over the right maxillary sinus. Its diagnostic puncture yielded a large amount of thick foul-smelling granulated pus. What is the most likely diagnosis in this case?

a. Acute purulent maxillary sinusitis

**b. Chronic purulent odontogenic maxillary sinusitis**

c. Chronic purulent maxillary sinusitis

d. Chronic atrophic maxillary sinusitis

e. Maxillary sinus tumor

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

a. Cancer of the body of the uterus

b. Endometriosis

**c. Ovarian cancer**

d. Left ovarian cyst

e. Uterine fibromyoma

555. In a maternity hospital a newborn had been presenting with cough attacks after eating. The child was discharged from the hospital on the 18th day due to a case of pneumonia. During the further 1,5 months the child had 2 cases of pneumonia. Periodically there are cough attacks after eating, especially if the child lies on the left side. Objectively: the II degree hypotrophy, isolated moist crackles, dyspnea. Stool and diuresis are not disrupted. What diagnosis is most likely?

a. Hernia of the esophageal opening

b. Posthypoxic encephalopathy

c. Mucoviscidosis

d. Tracheoesophageal fistula

e. Tracheobronchomalacia

556. A 45-year-old woman complains of increasing body weight throughout the last year. Examination revealed moon face syndrome, brittle hair, hirsutism, stretch marks on the abdomen, and disproportionally thin limbs. The patient's height is 162 cm, her body weight is 94 kg, her body mass index is  $35.8 \text{ kg/m}^2$ . What type of obesity is it?

a. Gynoid

b. Cerebral

c. Android

d. Dysplastic

e. Alimentary-constitutive

557. A 67-year-old woman complains of rapid fatigability and constant pain in the joints of her limbs and in her spine. She has a history of frequent bone fractures. Over the past year, the woman's height has decreased by 2 cm. Objectively, local accumulation of adipose tissue is observed in the area of the projection of her seventh vertebra. The doctor suspects osteoporosis. What instrumental study is the gold standard for diagnostics of osteoporosis?

a. X-ray densitometry

b. Computed tomography

c. Scintigraphy

d. Ultrasound

e. Radiography

558. A 58-year-old woman has undergone an urgent cholecystectomy and drainage of the abdominal cavity. In the postoperative period, she was prescribed heparin and developed hemorrhagic syndrome. What medicine should be used to eliminate the side effects of heparin in this case?

a. 10% solution of calcium chloride

b. 1% solution of protamine sulfate

c. 1% solution of calcium chloride

d. 5% solution of aminocaproic acid

e. 1% solution of vicasol (menadione)

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

a. Mutagenic

b. Fibrogenic

c. Toxic

d. Allergenic

e. Teratogenic

560. A patient complains of pain in the lower back, weakness in the right foot, and impaired walking. Examination reveals painful palpation of lumbar paravertebral points. Cough impulse sign is positive. The Lasegue sign is positive on the right at the angle of  $70^\circ$ . The Achilles reflex on the right is absent. There is weakness in the extensor muscles of the right foot, the patient has problems with standing on the right heel. The patient was diagnosed with lumbosacral radiculitis and right foot paresis. What group of medicines must be prescribed in this case?

a. Nonsteroidal anti-inflammatory drugs

b. Vitamins

c. Analgesics

d. Nootropics

e. Anticholinesterases

561. A woman was hospitalized with complaints of periodical pain in her lower abdomen that intensifies during menstruation, as well as weakness, indisposition, nervousness, and smearing discharge of dark blood from the vagina before and after menstruation. Bimanual research shows enlarged uterine body, the uterine appendages cannot be detected, the surface of the posterior fornix is tuberosus. Laparoscopy detects cyanotic inclusions on the ovaries, in the recto-uterine pouch of the peritoneal cavity, and on the paraproctium. Make the diagnosis:

a. Chronic salpingitis



**b. Disseminated endometriosis**

- c. Polycystic ovaries
- d. Genital tuberculosis
- e. Ovarian cystoma

562. On the fourth day of life, a healthy newborn child developed melena and started vomiting blood. Coagulogram reveals prolonged prothrombin time, decreased prothrombin index, and deficiency of plasma factors II, VII, IX, and X. What is the most likely disease in this case?

- a. Hemophilia A
- b. Disseminated intravascular coagulation syndrome
- c. Hemolytic disease of the newborn
- d. Neonatal sepsis

**e. Hemorrhagic disease of the newborn**

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

- a. Levofloxacin
- b. Carbenicillin

**c. Amoxicillin**

- d. Amikacin
- e. Doxycycline

564. On the 9th day after childbirth the obstetric patient developed high fever up to  $38^{\circ}\text{C}$  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. Fibrous cystic degeneration of the right mammary gland
- d. Serous mastitis
- e. Cancer of the right mammary gland

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

**a. Down syndrome**

- b. Congenital toxoplasmosis
- c. Congenital hypothyroidism
- d. Patau syndrome
- e. Edwards syndrome

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

**a. Hyperkalemia**

- b. Hypokalemia
- c. Hypocalcemia
- d. Hyperhydration
- e. Hypernatremia

567. A 28-year-old patient complains of a fever of  $38-39^{\circ}\text{C}$ , general weakness, and headache. In the middle third of the left lower leg, at the site of a minor skin damage, there are edema and skin redness with clear contours. What disease is most likely being observed in the patient?

**a. Erysipelas**

- b. Phlegmon of the lower leg

- c. Lymphangitis
- d. Obliterating endarteritis
- e. Acute thrombophlebitis

568. A 60-year-old man came to a hospital complaining of a bursting sensation behind his sternum that develops during fast walking and physical exertion. The pain lasts for approximately 5 minutes and passes on its own in a resting state. Objectively, his pulse is 75/min., blood pressure - 140/80 mm Hg. The heart borders are normal. Heart sounds are slightly weakened, rhythmic, and clear. ECG shows no changes. Make the provisional diagnosis:

- a. Myositis
- b. Exertional angina pectoris**

- c. Intercostal neuralgia
- d. Somatoform autonomic dysfunction
- e. Variant angina pectoris

569. A 54-year-old woman complains of a fogged vision in her right eye, rainbow circles in her vision, headache, and nausea. Within the last month she twice experienced a similar condition, but back then all the signs eventually disappeared and her sight was restored. Currently, all the signs have been persisting for over 2 days. Objectively, the patient has eyelid edema, congestive injection of the eyeball, corneal opacity, shallow anterior chamber of the eye, and dilated pupil that is unresponsive to the light. Her intraocular pressure is 48 mm Hg. Make the diagnosis:

- a. Glaucoma**

- b. Cyclitis
- c. Iridocyclitis
- d. Iritis
- e. Keratitis

570. A 32-year-old woman complains of general weakness, headache, excess body weight, pain in her bones, and irregular menstrual cycle. Objectively, her skin is dry and cyanotic. Purple-cyanotic stretch marks are observed in the area of her abdomen, shoulders, and thighs. Fat deposition is mainly observed on the face, neck, and trunk. Blood pressure - 165/100 mm Hg. Blood testing revealed glucose of 7.2 mmol/L and elevated ACTH levels. X-ray of the bones revealed signs of osteoporosis. What is the most likely diagnosis in this case?

- a. Cushing syndrome
- b. Alimentary obesity

- c. Cushing disease**

- d. Essential hypertension
- e. Pathological climacteric syndrome

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

- a. Myocarditis
- b. Dilated cardiomyopathy
- c. Tricuspid regurgitation

- d. Exudative pericarditis**

- e. Aortic stenosis

572. A 27-year-old woman complains of bleeding gums, nasal hemorrhages, multiple hematomas on the skin of her limbs and on the front of her torso, extreme general fatigue. Blood test: Hb- 64 g/L, erythrocytes -  $2.5 \cdot 10^{12}/L$ , reticulocytes - 16%, platelets -  $30 \cdot 10^9/L$ , ESR- 22 mm/hour. What approach would be most efficient for treatment of this pathology?

- a. Cytostatics
- b. Platelet concentrate transfusion
- c. Group B vitamins

- d. Splenectomy**

- e. Dicynone (Etamsylate)

573. An 8-year-old girl gains no weight and has a distended abdomen and diarrhea that occurs up to

4-5 times per 24 hours. According to the patient's medical history, the symptoms first appeared at the age of 6 months, after the introduction of complementary food - oatmeal - into her diet. Since then, the child has been experiencing abdominal bloating, diarrhea, and loose stools after eating cereals and products containing flour. Coprology test detects steatorrhea. Fibrogastroduodenoscopy detects subatrophic duodenitis. What is the most likely diagnosis in this case?

- a. Lactase deficiency
- b. Functional dyspepsia
- c. Pancreatitis

d. Celiac disease

- e. Mucoviscidosis

574. An 8-year-old child is being monitored for growth retardation. The child was born with asphyxia and the body weight of 2800 g. He studies well at school. His parents are of average height.

Objectively, height - 107 cm, body weight - 23 kg, he has underdeveloped facial skeleton that resembles a doll's face. The hair is thin, the skin is dry with an icteric tint. Subcutaneous adipose tissue is well developed on the neck, chest, and abdomen. The muscles are underdeveloped. What is the most likely diagnosis in this case?

- a. Down syndrome
- b. Chondrodystrophy
- c. Craniopharyngioma
- d. Fanconi syndrome

e. Pituitary dwarfism

575. A 25-year-old woman was hospitalized into the gynecological department with complaints of pain in her lower abdomen and high temperature of  $39.7^{\circ}\text{C}$ . Objectively, her blood pressure is 120/80 mm Hg, pulse - 108/min., of satisfactory strength and volume. The abdomen is moderately distended and sharply painful in its lower segments. The Bloomberg's sign is positive in the hypogastrium.

During vaginal examination, the uterus and its appendages cannot be palpated because of anterior abdominal wall rigidity. The posterior vaginal fornix is overhanging and sharply painful. What is the most likely diagnosis in this case?

- a. Acute adnexitis
- b. Ectopic pregnancy
- c. Ovarian apoplexy

d. Pelvioperitonitis

- e. Acute endometritis

576. A 49-year-old patient has been diagnosed with a fracture of the pelvic bones. A bladder injury is suspected. What method of examination is necessary in this case?

a. Excretory urography with contrast

- b. Laparoscopy
- c. Laparocentesis
- d. Ultrasound of the pelvis
- e. Magnetic resonance imaging of the pelvis

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

a. Lisinopril

- b. Bisoprolol
- c. Rosuvastatin
- d. Aspirin
- e. -

578. An 8-day-old boy was delivered to the hospital on the second day after the onset of the disease. His parents complain of his fussiness, regurgitation, body temperature up to  $38.5^{\circ}\text{C}$ , red skin with infiltration in the lumbar area. His medical history has no peculiarities. The child is in the severe condition, inert, pale, suckles poorly. In the lumbar area, on the sacrum and buttocks there is a tense infiltration with hyperemic and cyanotic areas and with a soft spot 8x7 cm in its center. The stool is 10 times in 24 hours, with green and mucous admixtures. What is the most likely diagnosis?

**a. Phlegmon of the newborn**

- b. Adiponecrosis
- c. Congenital soft-tissue tumor
- d. Hemangioma
- e. Erysipelas

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

- a. Hypoestrogenemia
- b. Overproduction of androgens
- c. Hypergonadotropinemia
- d. Insulin resistance

**e. Catabolic effect of corticosteroid excess**

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

- a. Gliclazide
- b. Glimepiride
- c. Glibenclamide

**d. Metformin**

- e. Insulin

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

- a. Osteoarthritis
- b. Ankylosing spondylitis
- c. Reactive arthritis
- d. Systemic sclerosis

**e. Rheumatoid arthritis**

582. A 27-year-old woman came to a doctor with complaints of enlarged lymph nodes on the right side of her neck and in the axillary region, night sweats, and a fever over 38°C. Morphological study of the biopsy material obtained from a lymph node detected Reed-Sternberg cells. What is the most likely diagnosis in this case?

- a. Malignant lymphoma
- b. Lymph node tuberculosis
- c. Tumor metastases in the lymphatic nodes
- d. Chronic lymphocytic leukemia

**e. Lymphogranulomatosis**

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

- a. Mallory-Weiss syndrome
- b. Peptic ulcer disease of the duodenum
- c. Esophageal achalasia

d. Ruptured varicose veins in the esophagus

e. Budd-Chiari syndrome

584. During physical exertion, a man with a cerebral artery aneurysm suddenly developed severe headache and vomiting and fainted. Objectively, the patient is agitated and wants to run somewhere. His pulse is 62/min., rhythmic, blood pressure - 140/90 mm Hg, body temperature - 37.5°C. He has nuchal rigidity and positive Kernig's sign. Focal neurological signs are absent. Make the provisional diagnosis:

a. Hypertensive crisis

b. Ischemic stroke

c. Brain hemorrhage

d. Meningitis

e. Subarachnoid hemorrhage

585. 3 hours after a trauma, a young man developed bradycardia of 46/min., anisocoria D>S, hemi-hyperreflexia S>D, hemihypesthesia on the left, and a convulsive disorder. The character of this process needs to be clarified. What method of examination will be the most accurate for this purpose?

a. Brain CT

b. Electroencephalography

c. Skull X-ray

d. Lumbar puncture

e. Echoencephalography

586. A district center is being supplied with water from an interlayer water-bearing stratum with high levels of calcium and magnesium salts. What is the optimal method of water treatment that should be applied before pumping the water into the distribution network?

a. Decontamination

b. Softening

c. Desalination

d. Sedimentation

e. Ozonation

587. A 48-year-old man complains of constant pain in the upper abdomen, predominantly on the left, which aggravates after eating, diarrhea, loss of weight. The patient has alcohol use disorder. Two years ago he had a case of acute pancreatitis. Blood amylase is 4 g/hour·l. Feces analysis: steatorrhea, creatorrhea. Blood sugar is 6,0 mmol/l. What treatment should be prescribed?

a. No-Spa (Drotaverine)

b. Contrykal (Aprotinin)

c. Insulin

d. Gastrozepin (Pirenzepine)

e. Panzinorm forte (Pancreatin)

588. What are the grounds for conducting a forensic medical examination?

a. Referral issued by investigative authorities

b. Referral issued by the family doctor

c. Wishes of the relatives

d. Resolution or ruling made by investigative authorities or a court

e. Referral issued by the head doctor of the inpatient department

589. A 30-year-old man complains of itching and a rash on the skin of his feet. The disease onset was 3 years ago. Objectively, on the soles of his feet there are clusters of vesicles that resemble boiled sago beans, as well as erosions with flaps of macerated epidermis on the periphery of the foci. Interdigital folds on both feet have fissures and erosions. What is the most likely pathology in this case?

a. Secondary syphilis

b. Psoriasis

c. Rubrophytia of the feet

d. Epidermophytosis of the feet

e. Dermatitis

590. A 17-year-old girl complains of a pain and swelling of her second finger on the right hand. Three days ago she made a manicure. The pain developed on the second day after that. Objectively, her

nail fold is swollen, hyperemic, overhangs the nail plate, and is painful on palpation. What is the most likely diagnosis in this case?

a. Subcutaneous panaritium

**b. Paronychia**

c. Erysipeloid

d. Subungual panaritium

e. Cutaneous panaritium

591. A neonatologist examines a full-term baby born from the second pregnancy, second full-term delivery, with the body weight of 3980 g. During the delivery, primary weakness of the labor activity was observed and obstetric assistance was used. Objectively, the right hand is adducted to the trunk and rotated, there are no movements in the shoulder and elbow joints, the "doll's arm" sign is observed, the hand is in the position of palmar flexion. The baby breastfeeds, suckles actively. What is the most likely diagnosis in this case?

a. Total brachial plexus paresis

**b. Duchenne-Erb paresis**

c. Humerus fracture on the right

d. Dislocation of the right shoulder

e. Dejerine-Klumpke paresis

592. A 25-year-old woman complains of general weakness, drowsiness, reduced ability to work, dizziness, difficulty swallowing food, dry skin, hair loss, and brittle nails. Objectively, her skin and visible mucosa are pale, the nails are brittle and transversely striated. What nutrient is deficient in this case, causing this condition in the patient?

a. Potassium

b. Phosphorus

c. Vitamin D

d. Vitamin B<sub>6</sub>

**e. Iron**

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

a. Byssinosis

b. Siderosis

c. Asbestosis

**d. Anthracosis**

e. Silicosis

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

**a. Doxazosin**

b. Verapamil

c. Nifedipine

d. Lisinopril

e. Propranolol

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

a. Fifth

**b. Second**

c. Fourth

d. Third

e. First

596. A 42-year-old man has received a polytrauma in a car accident: closed displaced fractures of his right humerus and the bones of his left forearm and a closed blunt abdominal trauma. He was brought into the admission room 30 minutes after the trauma. His skin is pale. His blood pressure is 90/20 mm Hg, the fracture sites are deformed and painful. The abdomen is rigid and its palpation causes sharp



pain. The Bloomberg's sign is positive. What medical procedures must be performed first in this case?

- a. Additional examination to determine the exact diagnosis
- b. Infusion therapy to stabilize the blood pressure
- c. Fracture blockade with a topical anesthetic
- d. Immobilization of the fractures, pain relief

**e. Urgent laparotomy**

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

- a. Posttraumatic phlegmon
- b. Wound supuration
- c. Hematogenous osteomyelitis
- d. Suture sinus

**e. Posttraumatic osteomyelitis**

598. A 42-year-old patient complains of acute spastic abdominal pain, nausea, vomiting with intestinal contents, abdominal distension that decreases after vomiting, and gas retention. According to the patient's history, the disease onset was 4 hours ago. Objectively, the following is observed: pulse - 110/min, the tongue is dry and coated, the abdomen is asymmetrically distended - enlarged upper half, soft to palpation, painful. Auscultation detects active peristaltic sounds with metallic tinkling, splashing, and gurgling. What is the most likely diagnosis in this case?

a. Nonspecific ulcerative colitis

**b. Intestinal obstruction**

- c. Acute pancreatitis
- d. Perforated stomach ulcer
- e. Acute cholecystitis

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

- a. Cardiogenic shock
- b. Hypovolemic shock
- c. Thyrotoxic crisis
- d. Hypoglycemic coma

**e. Acute adrenal insufficiency**

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

a. Measuring the ACTH levels in blood

**b. Measuring the 17-OH progesterone levels in blood serum and 17-ketosteroids excretion rate with urine**

- c. Measuring the TSH levels in blood
- d. Bone age assessment
- e. Karyotyping

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

- a. Lymphogranulomatosis
- b. Chronic lymphocytic leukemia**
- c. Chronic myeloid leukemia
- d. Acute lymphoblastic leukemia
- e. Acute myeloid leukemia

602. A patient underwent suture plication of the perforated duodenal ulcer. On the 3rd day after the operation he started producing a large amount of discharge from the abdominal drain tube. The discharge contains bile and has high amylase levels. What complication occurred in the patient?

- a. Acute postoperative pancreatitis
- b. Acute cholecystitis
- c. Suture incompetence of the ulcerative defect**
- d. Hemorrhage from the ulcer
- e. Early postoperative adhesive obstruction

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

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

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

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

605. A 65-year-old woman with diabetes mellitus was undergoing treatment with metformin. Because of high blood pressure, she was taking diuretics. Gradually, the effectiveness of the diuretic decreased and nausea and vomiting appeared. Objectively, the patient does not respond to stimuli, her skin is dry, the smell of acetone is absent. Blood pressure - 180/100 mm Hg. The heart sounds are muffled, pulse - 98/min. Her respiration is vesicular. The liver is +4 cm. Blood testing revealed the following: glucose - 48 mmol/L, Na - 156 mmol/L, K - 5.2 mmol/L, urea - 15 mmol/L. What complication has developed in the patient?

- a. Hypoglycemic coma
- b. Dyscirculatory coma
- c. Ketoacidotic coma
- d. Lactacidotic coma
- e. Hyperosmolar coma**

606. A 45-year-old woman is undergoing treatment for active rheumatism, combined mitral valve failure. During her morning procedures she suddenly sensed pain in the left hand, which was followed by numbness. Pain and numbness continued to aggravate. Objectively: the skin of the left hand is pale and comparatively cold. Pulse in the hand arteries is absent along the whole length. What treatment tactics is most efficient?

- a. Urgent thrombectomy
- b. Cardiac catheterization
- c. Prescription of antibiotics and antiinflammatory agents

**d. Urgent embolectomy**

**e. Prescription of fibrinolytics and anticoagulants**

607. A 51-year-old woman has a 2.5-month-long menstruation delay. She complains of profuse bloody discharge from her vagina for the last 15 days, irritability, and disturbed sleep. She has a history of menstrual dysfunction observed within the last year. Ultrasound shows that her uterus is normal for her age, the uterine appendages are normal, endometrial thickness is 14 mm. What tactics should the doctor choose in this case?

**a. Diagnostic curettage of the walls of the uterine cavity**

**b. Conservative treatment of the bleeding**

**c. TORCH panel test**

**d. Supravaginal amputation of the uterus without the appendages**

**e. Hysterectomy**

608. A 65-year-old man has an over 17-year-long history of chronic obstructive bronchitis. He complains of dyspnea with difficult inspiration, heaviness in his right subcostal region, and edema of feet and shins. Auscultation detects rough respiration and dry crackles over the lungs and an accentuated split second heart sound in the second intercostal region. What changes can be expected on the ECG?

**a. Extrasystole**

**b. Left atrial hypertrophy**

**c. Right ventricular myocardial hypertrophy**

**d. Deviation of the electrical axis of the heart to the left**

**e. Ciliary arrhythmia**

609. A children's preschool institution is located near a highway, where carbon monoxide levels in the air are 3-4 times higher than the maximum permissible concentration. What substance, detected in the children's blood, will confirm the harmful effect of polluted air?

**a. Hemoglobin**

**b. Reduced hemoglobin**

**c. Methemoglobin**

**d. Carboxyhemoglobin**

**e. Carbinhemoglobin**

610. A 48-year-old man, whose blood test has resulted in positive Wasserman and sedimentation reactions thrice, came to a doctor. His treponema pallidum immobilization test was positive as well. Examination shows no clinical manifestations of syphilis in the patient's skin, internal organs or nervous system. Make the diagnosis:

**a. Tertiary syphilis**

**b. Seropositive primary syphilis**

**c. Latent recurrent syphilis**

**d. Early latent syphilis**

**e. Recurrent secondary syphilis**

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

**a. Disturbed menstrual cycle, hyperpolymenorrhea**

**b. Full-term pregnancy, term labor**

**c. Disturbed menstrual cycle, amenorrhea**

**d. 12-week pregnancy, threatened spontaneous abortion**

**e. 12-week pregnancy, spontaneous abortion in progress**

612. A 47-year-old woman, who 2 days ago returned from Peru, complains of a pain and enlargement of the lymph nodes in her right inguinal region. She was diagnosed with bubonic plague. What medicine should be prescribed to the contact persons for urgent prevention of this disease?

**a. Doxycycline**

- b. Fluconazole
- c. Human immunoglobulin
- d. Heterologous serum
- e. Chloroquine

613. International normalization ratio (INR) control is necessary in the patients with atrial fibrillation who are taking the following antithrombotic drug:

- a. Dabigatran (direct thrombin inhibitor)
- b. Aspirin (cyclooxygenase enzyme inhibitor)
- c. Rivaroxaban (factor Xa inhibitor)

**d. Warfarin (vitamin K antagonist)**

- e. Clopidogrel (platelet ADP-receptor blocker)

614. A 23-year-old woman without visible cause developed a conflicting behavior at her workplace. She accused the management of underestimating her, claimed that she can be a deputy director, because she speaks four languages, is very attractive, and can make useful connections for the company. She has been dressing extravagantly, flirting with her colleagues, and singing loudly in her office. In fact, she has only the training of a computer operator and speaks no foreign languages. What is the likely clinical diagnosis?

- a. Epilepsy
- b. Mild mental retardation

**c. Manic episode**

- d. Depressive disorder
- e. Schizophrenia

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

- a. Rheumatism
- b. Systemic lupus erythematosus
- c. Thrombocytopenic purpura

**d. Rheumatoid arthritis**

- e. Chronic glomerulonephritis

616. A 5-year-old child complains of attacks of spasmodic cough. The child has been ill for 2 weeks after the dry cough appeared. After the treatment that was ineffective, relapses started occurring. During a cough attack, the child's face becomes red and neck veins swell. Objectively, the patient is pale, with edematous face and hemorrhages in the sclera. Auscultation detects a bandbox resonance over the lungs on percussion and dry crackles. X-ray detects increased transparency of the lung fields and intensified bronchial pattern. Blood test results are as follows: leukocytes -  $16 \cdot 10^9/\text{L}$ , lymphocytes - 72%, ESR - 4 mm/hour. What is the most likely diagnosis in this case?

- a. Tuberculous bronchoadenitis
- b. Adenovirus infection

**c. Pertussis**

- d. A foreign body in the airways
- e. Laryngotracheitis

617. A newborn baby has icteric skin. According to the mother's medical history, her first pregnancy was discontinued via a medical abortion at the term of 6 weeks. The mother's blood group is A(II), Rh(-). The child's blood group is A(II), Rh(+). Biochemical profiling of the umbilical cord blood revealed bilirubin levels of 82  $\mu\text{mol}/\text{L}$ , four hours later - 130  $\mu\text{mol}/\text{L}$ . What is the most likely diagnosis in this case?

- a. Biliary atresia
- b. Hemorrhagic disease of the newborn

c. Congenital hepatitis

d. Hemolytic disease of the newborn

e. Physiological jaundice

618. A 28-year-old woman came to a doctor with complaints of facial edema, moderate leg edemas, and urine that periodically assumes the color of <<meat slops>>. As a teenager, she had frequent tonsillitis. Objectively, her skin is pale,  $t^{\circ} - 36.8^{\circ}\text{C}$ , pulse - 68/min., rhythmic, blood pressure - 170/110 mm Hg. What changes in the patient's urine are the most likely in this case?

a. Erythrocyturia and uricosuria

b. Proteinuria, hematuria, cylindruria

c. Increased specific gravity, hematuria, bacteriuria

d. Decreased specific gravity, proteinuria, a small amount of urine sediment

e. Decreased specific gravity, proteinuria, myoglobinuria

619. A 19-year-old young man was diving and hit his head on the bottom of the pool. He complains of pain in the neck, his head movements are limited and painful. During examination his head is bowed forward and to the right and the patient supports it with his hands. Palpation detects tense neck muscles and protruding spinous process of the IV cervical vertebra (C4). When pressure is applied to this process and to the head (axial load), the pain intensifies. Make the provisional diagnosis:

a. Complicated cervical fracture

b. Cervical contusion

c. Neck muscle injury

d. Spinal root injury

e. Uncomplicated cervical fracture

620. After being stung by a bee, an 18-year-old patient feels hot and presents with dyspnea and edema of her lip, face, and neck. The patient's breathing is difficult and noisy, the patient has cough. The skin is pale and cold to the touch. Blood pressure - 75/50 mm Hg. Pulse - 98/min., thready. Tachycardia is observed, the heart sounds are muffled and rhythmic. What is the most likely diagnosis in this case?

a. Urticaria

b. Anaphylactic shock

c. Hypotonic crisis

d. Status asthmaticus

e. Quincke's edema

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

a. Rupture of the capsular ligament apparatus of the hip joint

b. Subtrochanteric femoral fracture

c. Diaphyseal femur fracture

d. Femoral neck fracture

e. Transtrochanteric femoral fracture

622. A 38-year-old woman, para 3, has a history of 5 artificial abortions. Five minutes after giving birth, she started bleeding from her genital tracts (350 mL). The woman's condition is satisfactory, her pulse is 92/min., blood pressure is 100/60 mm Hg. There are no signs of placental expulsion, its manual removal has to be performed. In some spots the placenta is somewhat difficult to detach. Make the diagnosis:

a. Partial placenta adherens

b. Placenta accreta

c. Total placenta adherens

d. Trapped placenta

e. Hypotonic bleeding

623. A 60-year-old man complains of a heavy sensation in his scrotum. Objectively, there is a scrotal edema on the left. The testicle is of normal size, but above it a soft edema is palpable. The edema is limited to the scrotum, can be compressed, and disappears when the patient lies down. Make the diagnosis:

**a. Varicocele**

- b. Inguinal hernia
- c. Subcutaneous varicose veins
- d. Inguinal lymphadenopathy
- e. Ectopic testicle

624. A 7-year-old boy suddenly developed pain and edema in his right knee. The day before, at school, he took part in cross-country skiing. There is no family history of hemophilia or susceptibility to bleeding. Objectively, his body temperature is  $37.5^{\circ}\text{C}$ . The knee is painful on palpation, hot to the touch, and has edema with local tissue tension above it. In complete blood count: Hb - 123 g/L, leukocytes -  $5.6 \cdot 10^9/\text{L}$ , platelets -  $354 \cdot 10^9/\text{L}$ , prothrombin time - 12 seconds (normal range is 10-15 seconds), activated partial thromboplastin time - 72 seconds (normal range is 35-45 seconds). Bleeding time is normal, the factor VIII levels constitute 5% of normal value. Make the diagnosis:

- a. Hemophilia B
- b. Thrombocytopenia

**c. Hemophilia A**

- d. Vitamin K deficiency
- e. Henoch-Schoenlein purpura

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

- a. Biliary dyskinesia
- b. Recurrence of viral hepatitis B
- c. Residual effects of hepatitis B
- d. Development of hepatic cirrhosis

**e. Development of chronic hepatitis**

626. Throughout the last year a 27-year-old man notes fatigue, excessive sweating, and heaviness in his left subcostal region, especially after eating. Objectively, his spleen and liver are enlarged. In clinical blood test: erythrocytes -  $3.2 \cdot 10^{12}/\text{L}$ , Hb - 100 g/L, color index - 0.87, leukocytes -  $100 \cdot 10^9/\text{L}$ , basophils - 7%, eosinophils - 5%, monocytes - 15%, juvenile - 16%, band neutrophils - 10%, segmented neutrophils - 45%, lymphocytes - 2%, monocytes - 0%, reticulocytes - 0.3%, platelets -  $400 \cdot 10^9/\text{L}$ , ESR - 25 mm/hour. Make the diagnosis:

- a. Chronic lymphocytic leukemia
- b. Acute leukemia

**c. Chronic myelogenous leukemia**

- d. Erythremia (polycythemia vera)
- e. Hepatic cirrhosis

627. The body of a 35-year-old man was found in a forest, hanging from a noose tied to a tree branch. Face and neck tissues of the deceased are cyanotic, while the legs are normally colored. The ligature mark is closed and clearly defined. What are the cause and manner of death in this case?

- a. Mechanical asphyxia as the result of airway obstruction, the manner of death - homicide
- b. Mechanical asphyxia as the result of chest and abdomen compression, the manner of death - homicide
- c. Mechanical asphyxia as the result of strangulation by a noose, the manner of death - non-homicide
- d. Mechanical asphyxia as the result of strangulation by a noose, the manner of death - homicide**
- e. Mechanical asphyxia as the result of hanging, the manner of death - non-homicide

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

**a. The child was born alive**

- b. Hyaline membrane disease
- c. The child was born dead
- d. Secondary atelectasis
- e. Primary atelectasis

629. A 21-year-old man was hospitalized on the 2nd day of the disease. His general condition is



severe, body temperature is  $39^{\circ}\text{C}$ ) On his skin there are numerous irregular-shaped hemorrhagic elements. The diagnosis of meningococemia was made. The next day his body temperature suddenly decreased, blood pressure was 80/40 mm Hg, pulse was 120/min. Acrocyanosis was detected. What complication did the patient develop?

- a. Acute liver failure
- b. Acute heart failure
- c. Acute hemorrhage
- d. Cerebral coma
- e. Acute adrenal insufficiency**

630. A 45-year-old man has been suffering from ankylosing spondylitis for 15 years. For the last 3 years he has been noticing facial swelling and edemas of the limbs. Objectively, he assumes a "beggar's" position. X-ray shows "bamboo spine" changes in the thoracic and lumbar segments. Heart ultrasound shows aortic regurgitation. Complete blood count: Hb- 106 g/L; leukocytes -  $8.9 \cdot 10^9/\text{L}$ ; ESR- 40 mm/hour. Daily proteinuria - 9.6 grams per 24 hours. Blood creatinine - 230  $\mu\text{mol/L}$ . What is the cause of kidney failure in this case?

- a. Medicine side effects
- b. Concomitant heart disease
- c. Urolithiasis

**d. Renal amyloidosis**

- e. Pyelonephritis

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

**a. Juvenile rheumatoid arthritis**

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

632. A 16-year-old teenager has been bitten by a dog. The bites are located in the area of face and fingertips. The dog is a stray and cannot be observed. Primary surgical treatment of the wound was performed without removal of the wound edges. What tactics should be chosen by a doctor for rabies prevention?

- a. Prescribe anti-rabies immunoglobulin and ribavirin
- b. Prescribe anti-rabies immunoglobulin and anti-rabies vaccine**
- c. Prescribe anti-rabies vaccine and ribavirin
- d. Prescribe anti-rabies vaccine and human immunoglobulin
- e. Prescribe human immunoglobulin and ribavirin

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

- a. Tertiary medical care
- b. Palliative medical care**

- c. Primary medical care
- d. Secondary medical care
- e. Emergency medical care

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

- a. Antioxidants
- b. Antispasmodics and choleretics**
- c. Choleretics and cholekinetics
- d. Antibiotics
- e. Sedatives and cholekinetics

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

- a. Uncontrolled exogenous
- b. Uncontrolled endogenous**

- c. Controlled exogenous
- d. Controlled endogenous
- e. Controlled social

636. The process of open-cut mining requires drilling and blasting operations, rock and ore excavation, transportation of ore to fragmentation and sorting factories and transportation of barren rock to slag-heaps, road building and maintenance, repair works. What factor of production is most important for miner's health?

- a. Vibration
- b. Adverse microclimate
- c. High content of explosion gas
- d. Noise

**e. High content of dust in the air**

637. A 40-year-old man with Bekhterev disease (ankylosing spondylitis) complains of elevated body temperature up to  $37.8^{\circ}\text{C}$ , back pain and stiffness, especially observed during the second half of the night. This condition has been lasting for 2 years. Objectively: reduced spinal mobility, painful sacroiliac joint, erythrocyte sedimentation rate - 45 mm/hour. X-ray shows narrowing of the intervertebral disc space and of the sacroiliac joint. What eye pathology is often associated with this type of disease progression?

- a. Optic nerve atrophy
- b. Blepharitis

**c. Iridocyclitis**

- d. Cataract
- e. Retinal detachment

638. A 50-year-old man, who works as a polisher at a combine-building factory, addressed the factory's sectorial doctor with complaints of general fatigue, sensations of numbness and pain in his fingers. Objectively: the skin of his fingers is pale. Reaction to pain, tactile and thermal stimuli was revealed to be slightly disrupted. No disruptions can be observed within the other organs and systems. What disorder is most likely?

- a. Syringomyelia
- b. Raynaud's disease
- c. Multiple neuritis
- d. Deforming arthrosis

**e. Pneumatic hammer disease**

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

- a. Major depressive disorder
- b. Reactive paranoid psychosis
- c. Oneiroid syndrome

**d. Schizophrenia, paranoid subtype**

- e. Bipolar disorder, mixed episode

640. A 60-year-old patient has been hospitalized in an unconscious state. According to the patient's medical history, he has diabetes mellitus and arterial hypertension and takes insulin and hypotensive drugs. Objectively, the patient's condition is severe, the skin is dry, the turgor is reduced, the tongue is dry and has a brown coating, the tone of the muscles and eyeballs is reduced. Body temperature -  $38.2^{\circ}\text{C}$ . Pulse - 108/min, of poor volume. Auscultation detects muffled heart sounds. Blood

pressure - 90/50 mm Hg, the breathing is rapid and shallow. There is no smell of acetone. Blood test: glucose - 58 mmol/L, total protein - 105 g/L, urea - 16 mmol/L, sodium - 238 mmol/L, potassium - 5.5 mmol/L, lactic acid - 0.8 mmol/L. Urinalysis: glucose - 15 mmol/L, no ketone bodies. What type of coma has most likely occurred in the patient?

- a. Hepatic coma
- b. Hyperosmolar coma**
- c. Ketoacidotic coma
- d. Uremic coma
- e. Lactic acid coma

641. A patient is 45 years old. He was referred for a consultation with a psychiatrist due to complaints of abdominal pain and discomfort that occur in emotionally straining situations. Objectively, no changes of the gastrointestinal tract were detected. The complaints emerged over 10 years ago against the background of severe alcohol poisoning. The patient has been repeatedly visiting gastroenterologists, who were unable to find any significant changes in the patient. The prescribed therapy was ineffective. What is the likely conclusion?

- a. Organic brain disorder
- b. Functional dyspepsia
- c. Chronic alcoholism
- d. No disorders
- e. Somatoform autonomic dysfunction**

642. A 55-year-old woman complains of a recurrent diarrhea, peeling and pigmentation of the exposed areas of her skin (neck, hands, and feet), irritability, and anxiety. What vitamin deficiency is it?

- a. Pantothenic acid
- b. Retinol
- c. Riboflavin
- d. Nicotinic acid**
- e. Thiamine

643. A worker, who was involved in fire fighting inside the building that stored 2 kg of mercury, has been delivered to a hospital with complaints of emotional expansiveness, palpitations, excessive sweating, body tremor, heart pain. Within one day his condition aggravated. Objectively: the skin is pale and moist. The patient is depressed. Permanent red dermographism, erethism, unstable BP are observed. What drug is the serum in this case?

- a. Atropine sulfate
- b. Dipyroxime
- c. Amyl nitrite
- d. Unithiol**
- e. Calcium tetacine

644. A 23-year-old man complains of severe pain in his left knee joint. Objectively the left knee joint is enlarged, with hyperemic skin, painful on palpation. Complete blood count: erythrocytes -  $3.8 \cdot 10^{12}/L$ , Hb- 122 g/L, leukocytes -  $7.4 \cdot 10^9/L$ , platelets -  $183 \cdot 10^9/L$ . Erythrocyte sedimentation rate - 10 mm/hour. Bleeding time (Duke method) - 4 min., Lee-White coagulation time - 24 min. Partial thromboplastin time (activated) - 89 seconds. Rheumatoid factor - negative. What is the most likely diagnosis?

- a. Thrombocytopathy
- b. Hemophilia, hemarthrosis**
- c. Rheumatoid arthritis
- d. Werlhof disease (immune thrombocytopenia)
- e. Hemorrhagic vasculitis (Henoch-Schonlein purpura), articular form

645. A 40-year-old man, a welder, uses manganese electrodes in his line of work (18 years of experience). He complains of difficulties with writing, bad mood, inertness, gait abnormalities, problems with speech, and hand tremors. Objectively the following is observed in the patient: hypomimia, increased muscle tone of plastic type, and quiet monotonous speech, tremor of the tongue, pill-rolling tremor of the fingers, and retropulsion. What syndrome developed in this patient due to manganese poisoning?

a. Parkinsonism

b. Meningism

c. Vestibular syndrome

d. Polyneuritic syndrome

e. Hypothalamic syndrome

646. Chemical analysis of the water has detected increased concentration of nitrogen-containing salts, iron and sulfates. What parameter of water quality is most informative in such cases and indicates fresh contamination of water with organic substances of animal origin?

a. NO<sub>2</sub>

b. Fe

c. NH<sub>3</sub>

d. SO<sub>4</sub>

e. NO<sub>3</sub>

647. A 7-year-old boy has been receiving treatment for a month. At the time of hospitalization, he had marked edemas, and daily urine protein of 4.2 g. Biochemical blood test shows persistent hypoproteinemia (43.2 g/L) and hypercholesterolemia (9.2 mmol/L ). What leading glomerulonephritis syndrome is most likely in this patient?

a. Nephritic

b. Nephrotic

c. Isolated urinary

d. Hematuric

e. Mixed

648. A 42-year-old man was hospitalized 3 hours after an injury with marked subcutaneous emphysema of the upper torso, dyspnea, and tachycardia of 120/min. X-ray detects no pneumothorax, but shows a significant expansion of the mediastinum in both directions. What emergency aid must be provided in this case?

a. Thoracoscopy

b. Puncture of the pleural cavity

c. Thoracotomy

d. Drainage of the anterior mediastinum

e. Drainage of the pleural cavity

649. A 3-year-old child presents with dyspnea that abates in the sitting position, occasional loss of consciousness and seizures, delayed physical development, cyanosis, drumstick fingers. Echocardiography detects aortic dextroposition, ventricular septal defect, pulmonary artery stenosis, and right ventricular hypertrophy. What is the most likely diagnosis?

a. Ventricular septal defect

b. Transposition of the great vessels

c. Acquired valvular disease

d. Tetrad of Fallot

e. Coarctation of the aorta

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

a. Pneumonia

b. Emphysema of the lungs

c. Bilateral pneumothorax

d. Pulmonary edema

e. Atelectasis of both lungs

651. A 27-year-old patient complains of irregular menstruation with delays of 2-3 months, significant body weight gain, hirsutism. She has been married for the last 5 years and had no pregnancies. Vaginal examination shows that the uterus is under 4 cm in size, on both sides there are dense mobile ovaries 4-5 cm in size that are painless during palpation. Ultrasound detects bilateral

enlargement of the ovaries to  $10.5 \text{ cm}^3$ , thickening of the ovarian capsule, and 8 immature follicles 5-6 mm in diameter, located on the periphery like a "necklace". What is the most likely diagnosis in this case?

**a. Sclerocystic ovary syndrome**

- b. Chronic bilateral salpingitis
- c. Hypomenstrual syndrome
- d. Bilateral ovarian cysts
- e. Adnexal tuberculosis

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

- a. Metroendometritis
- b. Uterine fibromyoma
- c. Uterine cancer
- d. Ectopic pregnancy

**e. Endometriosis**

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

**a. Chronic anal fissure**

- b. Rectal cancer
- c. Rectal polyp
- d. Chronic proctosigmoiditis
- e. Chronic hemorrhoids

654. A 19-year-old young woman complains of absence of menstruations, lethargy, and weight loss. One year ago she had a pathological childbirth with significant blood loss and no lactation after the childbirth. Vaginal examination shows that the vagina is narrow, the uterus is reduced in size, and the ovaries are not palpable. Laboratory testing detected hypoenestrogenemia. What is the most likely diagnosis in this case?

**a. Genital tuberculosis**

**b. Sheehan syndrome**

- c. Astheno-vegetative syndrome
- d. Stein-Leventhal syndrome
- e. Hypothyroidism

655. A 42-year-old man, a worker at the meat processing factory, developed an itching spot on his lower jaw, which gradually transformed into a slightly painful carbuncle 3 cm in diameter, surrounded by a painless swelling that reaches the clavicle. Temperature is subfebrile, under  $37.8^{\circ}\text{C}$ . The doctor suspects anthrax. What drug should this man be prescribed for treatment?

- a. Biseptol (Co-trimoxazole)
- b. Azidothymidin (Zidovudine)

**c. Penicillin**

- d. Interferon alpha
- e. Levomycetin (Chloramphenicol)

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

**a. Optimization of the average bed occupancy rate per year**

**b. Rational use of the bed fund**

- c. Decrease of the length of inpatient stay
- d. Decreased mortality during inpatient treatment
- e. Intensification of the bed fund usage

657. An industrial area has high levels of noise pollution and the air of the working area is highly

polluted with sulfur anhydride. What type of harmful effect can these factors have on the body in such conditions?

- a. Specific
- b. Combined
- c. Complex

d. Joint

- e. Separate

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

a. B

b. C

c. D

d. -

e. A

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

a. Reactive arthritis

b. Rheumatoid arthritis

c. Gouty arthritis

d. Osteoarthritis

e. Reiter's syndrome

660. 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. Streptococcus

b. Epstein-Barr virus

c. Rubella virus

d. Mumps virus

e. Meningococcus

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

a. Mutton

b. Poultry

c. Beef

d. Pork

e. Rabbit

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

a. Doxazosin

b. Bisoprolol

c. Urapidil

d. Torasemide

e. Lisinopril

663. A 34-year-old woman complains of irritability, tearfulness, unmotivated mood swings, finger tremor, rapid fatigability, irregular menstrual cycle, pigmentation appearing around her eyes, and weight loss (10 kg within the last 4 months). Objectively, the following is observed: heart rate -



110/min., blood pressure - 140/75 mm Hg. The thyroid gland is slightly enlarged on palpation, painless, soft and elastic. Dalrymple, Stellwag, Mobius, and von Graefe signs are positive. What is the most likely diagnosis in this case?

a. Hyperparathyroidism

**b. Thyrotoxicosis**

c. Addison's disease

d. Hypothyroidism

e. Dermatomyositis

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

**a. Genital herpes infection**

b. Vulvar cancer

c. Papillomavirus infection

d. Cytomegalovirus infection

e. Primary syphilis

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

a. Preparation of the cervix for preterm birth

b. Continuation of the intensive therapy

c. Conservative management of the delivery

d. Labor induction

**e. Immediate delivery by caesarean section**

666. A 14-year-old girl has chronic glomerulonephritis and chronic kidney failure. The girl's anemic syndrome continues to progress. What drug should be prescribed for the pathogenetic therapy of this type of anemia?

**a. Erythropoietin**

b. Packed erythrocytes

c. Cyanocobalamin

d. Folic acid

e. Iron supplements

667. A 25-year-old pregnant woman was hospitalized into the inpatient department based on the referral from the maternity clinic. She has a history of two spontaneous miscarriages. Examination detects pregnancy with the gestational age of 14-15 weeks. Vaginally, the cervix is shortened, its outer orifice allows inserting a fingertip. The patient was diagnosed with isthmic cervical insufficiency. What would be the doctor's tactics in this case?

a. Prescribe bed rest and sedatives

b. Provide hormonal treatment

c. Perform amniocentesis and terminate the pregnancy

**d. Place a circular stitch on the cervix (cervical cerclage)**

e. Administer uterotonics, not waiting for a spontaneous abortion to occur

668. A 17-year-old girl has height of 172 cm and weight of 40 kg. Nevertheless, she considers herself to be extremely overweight. For the last 2 years she has been keeping to a strict low-calorie diet, while simultaneously working out to exhaustion and tightly binding her waist with a cord. She often self-induces vomiting. The girl complains of unpleasant sensations in her esophagus and amenorrhea. What is the most likely diagnosis?

**a. Anorexia**

b. Bulimia

c. Personality disorder

d. Depression

e. Response to stress

669. A 28-year-old man complains of nocturnal arthralgias and myalgias and lumbar pain that intensifies during trunk flexion and extension. Examination detects increased ESR and C-reactive protein levels. X-ray shows bilateral sacroiliitis. Make the provisional diagnosis.

a. Osteochondrosis

b. Bone tuberculosis

c. Ankylosing spondylitis

d. Polymyositis

e. Rheumatism

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

a. Penetrating ulcer

b. Ulcer malignancy

c. Perforation of a duodenal ulcer

d. Pyloric stenosis

e. Gastrointestinal bleeding

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

a. Creatine kinase

b. Rheumatoid factor

c. Antistreptolysin O

d. Seromucoid

e.  $\alpha_1$ -antitrypsin

672. A woman complains of a severe pain in her throat on the left, difficult swallowing and mouth opening, elevated body temperature, and general malaise. The onset of the disease was 4 days ago after a case of tonsillitis. Examination detects a trismus of the masticatory muscles, the left tonsil is displaced toward the midline, the anterior palatal arch is infiltrated and protruding. The regional lymph nodes on the right are enlarged and painful on palpation. Make the diagnosis:

a. Acute pharyngitis

b. Lacunar tonsillitis

c. Infectious mononucleosis

d. Peritonsillar abscess

e. Tonsillar tumor

673. 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 a papular rash covered in silvery scales, "thimble" sign (small pits on the nails), affected joints. What is the most likely diagnosis?

a. Psoriasis

b. Panaritium

c. Rheumatism

d. Lupus erythematosus

e. Onychomycosis

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

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

**e. Ketoacidotic coma**

675. A 56-year-old patient complains of decreased appetite, weakness, palpitations, pain and a burning sensation in the tongue, heaviness in the epigastric region, and numbness in the limbs. Objectively, the following is observed: pale skin with a lemon-colored tint, Hunter's glossitis, enlarged liver and spleen. Complete blood count: erythrocytes -  $2.8 \cdot 10^{12}/L$ , hemoglobin - 100 g/L, color index - 1.2. Erythrocytes are large, often oval, with Jolly bodies and Cabot rings. What is the most likely diagnosis in this case?

- a. Chronic hepatitis
- b. Iron deficiency anemia

**c. B<sub>12</sub> and folate deficiency anemia**

- d. Hemolytic anemia
- e. Aplastic anemia

676. A 35-year-old woman addressed a gynecological in-patient department with complaints of regular pains in her lower abdomen, which increase during menstruation, and dark-brown sticky discharge from the genital tracts. On bimanual examination: the uterine body is slightly enlarged, the appendages are not palpated. Mirror examination of the uterine cervix reveals bluish spots. What diagnosis is most likely?

- a. Cervical erosion
- b. Cervical fibroid
- c. Cervical polyp
- d. Cervical cancer

**e. Cervical endometriosis**

677. Standardization is an important priority direction of modern healthcare development in the majority of economically developed countries of the world. What normative document is systematically developed to assist practitioner and patient decisions about appropriate health care for specific diseases and clinical circumstances?

- a. Accreditation certificate
- b. Standard of medical care

**c. Clinical practice guidelines**

- d. Certificate of conformity to established standards
- e. Medical care provision certificate

678. A 40-year-old victim of a traffic accident sustained the following injuries: closed diaphyseal femur fracture, brain concussion, multiple rib fractures, hemopneumothorax, degloving shin injuries. What injuries require the most urgent attention?

- a. Brain concussion
- b. Multiple rib fractures, hemopneumothorax**

- c. All injuries are equivalent
- d. Closed diaphyseal femur fracture
- e. Degloving shin injuries

679. On examination a man presents with the following signs: progressing weakness, loss of working ability, rapid physical and mental fatigability, sensations of cold and hunger, and weight loss. What type of alimentary disorder is it?

- a. Vitamin deficiency
- b. Protein-energy undernutrition**
- c. Polyunsaturated fatty acid deficiency
- d. Mineral deficiency
- e. Dietary fiber deficiency

680. A 34-year-old man undergoes treatment in a psychiatry unit for exacerbation of his schizophrenia. Objectively, he stays in bed, his movements are inhibited, no contact. The patient does not respond to the questions. The position remains unchanged, the patient is hypomimic, such signs as puckering of the lips, waxy flexibility, "psychological pillow" are present. The patient has been

remaining in this condition for a week. He is being fed parenterally. What psychomotor disorder is it?

a. Catatonic stupor

b. Depressive stupor

c. Exogenous stupor

d. Anergic stupor

e. Psychogenic stupor

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

a. Incomplete miscarriage

b. Threatened spontaneous miscarriage

c. Miscarriage that has started

d. Ongoing miscarriage

e. Hydatidiform mole

682. A 60-year-old woman complains of limited mobility in her distal interphalangeal joints of both hands observed for 12 years and periodic pain in her back. Objectively, nodular thickening of the distal interphalangeal joints of both hands is observed, fingers are deformed, mobility is limited. No other pathology was detected. Results of blood and urine tests are within the normal range. What is the most likely diagnosis in this case?

a. Rheumatoid arthritis

b. Ankylosing spondyloarthritis

c. Gout

d. Osteoarthritis

e. Reactive arthritis

683. A patient was brought into the pulmonology department with complaints of inspiratory dyspnea and dry cough at the highest point of inhalation. On examination the following is observed: pale skin, cyanotic lips, "Hippocratic fingers". Auscultation detects Velcro-type crackles (like opening a Velcro fastener). X-ray shows a "ground glass opacity" pattern. What is the most likely diagnosis?

a. Pulmonary histiocytosis X

b. Exogenous allergic alveolitis

c. Idiopathic pulmonary fibrosis

d. Hand-Schuller-Christian disease

e. Idiopathic pulmonary hemosiderosis

684. Preventive examination of a 75-year-old woman with a moderately active lifestyle shows total serum cholesterol of 5.1 mmol/L (208 mg/dL) and high-density lipoprotein levels of 70 mg/dL. Her ECG is normal. What advice about her diet should be given to this woman?

a. Reduce the intake of simple carbohydrates

b. Reduce the cholesterol intake

c. No changes in the diet

d. Increase the fiber intake

e. Reduce the intake of saturated fats

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

a. Right abducens nerve

b. Right oculomotor nerve

c. Right optic nerve

d. Left abducens nerve

e. Left trochlear nerve

686. A 40-year-old man complains of impaired vision, rapid heartbeat, and an aching pain in the muscles of his back, lumbar region, and legs and in his shoulder and hip joints. Objectively, the signs of uveitis can be observed. X-ray detects blurring of the contours of the sacroiliac joints and single

syndesmophytes between the vertebral bodies. Laboratory testing detects antibodies against HLA-B27 antigens, anemia, and ESR of 28 mm/hour. What disease causes such a clinical presentation?

- a. Reiter's syndrome
- b. Systemic lupus erythematosus
- c. Rheumatoid arthritis
- d. Ankylosing spondylitis**
- e. Deforming spondyloarthritis

687. A 27-year-old woman, a teacher in the elementary school, complains of frequent stools, up to 3 times per day, with lumpy feces and large amount of mucus, abdominal pain that gradually abates after a defecation, irritability. Her skin is pale and icteric. Pulse is 74/min., rhythmic, can be characterized as satisfactory. Blood pressure is 115/70 mm Hg. The abdomen is soft, moderately tender along the colon on palpation. Fiberoptic colonoscopy detects no changes. What disease can be suspected?

- a. Irritable bowel syndrome**
- b. Crohn disease (regional enteritis)
- c. Whipple disease
- d. Chronic enteritis
- e. Chronic non-ulcerative colitis

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

- a. Stein-Leventhal syndrome
- b. Pituitary tumor (Cushing disease)
- c. Uterine pregnancy
- d. Pituitary amenorrhea (Sheehan syndrome)**
- e. Primary amenorrhea

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

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

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

- a. Measles
- b. Pityriasis versicolor
- c. Typhus
- d. Secondary syphilis**
- e. Toxidermia

691. The people living in a radiation-contaminated area are recommended to include pectin in their diet for removal of radionuclides from the body. What products are the main source of pectin?

- a. Bread
- b. Pasta
- c. Milk
- d. Meat
- e. Vegetables and fruits**

692. A 40-year-old man claims that his wife is cheating on him and presents a "proof" of her infidelity.

He repeatedly initiated scandals with his wife at home and at work, demanding that she confess her infidelity, insulted her, and threatened to kill her. What preventive measures should be taken against socially dangerous actions on his part?

- a. Outpatient treatment
- b. Family counseling
- c. Consultation with the psychologist
- d. Consultation with the general practitioner
- e. Consultation with the psychiatrist**

693. A 2-month-old baby presents with body weight loss, projectile vomiting after each feeding, and stool retention (once per 48 hours). Examination detects the "hourglass" symptom. Vomitus is foul-smelling and contains no bile. The baby is breastfed. What is the most likely diagnosis in this case?

- a. Congenital pyloric stenosis**
- b. Intussusception
- c. Pylorospasm
- d. Habitual regurgitation
- e. Intestinal obstruction

694. A 30-year-old woman complains of no periods for 5 months and milk discharge from her mammary glands. Examination reveals that the uterus is small, mobile, and painless; the appendages are normal. Skull X-ray detects no pathology. Laboratory studies detect increased levels of prolactin in patient's blood serum. Make the diagnosis.

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

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

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

696. A patient visited the doctor at a rural outpatient clinic twice during the calendar year (in March and in November). In both cases, the patient was diagnosed with acute respiratory viral infection. How to fill in the statistical forms for registration of final (clarified) diagnoses, to account for these morbidity cases?

- a. For the first case with the (+) sign, for the second case with the (-) sign
- b. For each case separately with the (+) sign**
- c. For each case separately with the (-) sign
- d. The forms are not filled for either of these cases
- e. For the first case with the (+) sign, for the second case no form is necessary

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

- a. Ovarian endometriosis
- b. Hormone-producing ovarian tumor
- c. Chorionepithelioma
- d. Adenomyosis**



e. Retrocervical endometriosis

698. What device is used to measure the level of natural light?

a. Anemometer

b. Hygrometer

c. Catathermometer

d. Luxmeter

e. Actinometer

699. A 46-year-old man, suffering from a constricting pain in the cardiac area, developed circulatory and respiratory arrest. ECG monitor shows a large-wave ventricular fibrillation. What should be done first in this case?

a. Perform defibrillation

b. Give lidocaine intravenously

c. Give dopamine intravenously

d. Give atropine intravenously

e. Implant an electronic pacemaker

700. A 58-year-old woman has type 2 diabetes mellitus that is compensated with diet and metformin. She prepares for cholecystectomy. Objectively, her height is 164 cm, weight is 90 kg, heart rate is 72/min., blood pressure is 130/80 mm Hg. Her abdomen is soft, painful in the right subcostal region. The liver is not enlarged. Fasting glucose - 6.2 mmol/L. Glycated hemoglobin - 6.5%. What further tactics of sugar-lowering therapy should be chosen in this case?

a. Prescription of a short-acting insulin

b. Prescription of glurenorm (gliquidone)

c. Prescription of a long-acting insulin

d. Prescription of an insulin mixture

e. Continue the present scheme of therapy

701. A 45-year-old man underwent a cardiac surgery one week ago. His general state has been deteriorating since then: dyspnea at rest, retrosternal pain that irradiates to the neck, marked weakness. Objectively his body temperature is hectic. His cardiac borders are expanded, apical beat is weakened. Auscultation detects pericardial friction rub. What is the most likely diagnosis?

a. Myocardial infarction

b. Acute cardiac aneurysm

c. Pulmonary embolism

d. Acute pericarditis

e. Acute myogenic dilatation of the heart

702. A person was hospitalized with a closed craniocerebral trauma 8 hours after a car accident. The patient is unconscious. Objectively, there are anisocoria, a wound in the parietal area 3.0x1.0 cm in size, and neck muscles rigidity. The pulse is 58/min., hard. Convulsive syndrome is observed. What is the most important indication for immediate surgery in this case?

a. Intensifying seizures

b. Anisocoria

c. Intracranial hemorrhage

d. Wounds

e. Unconsciousness

703. A 25-year-old woman has been suffering from diabetes mellitus since she was 9 years of old. She was admitted into the nephrology unit with significant edemas of the face, upper and lower extremities. Blood pressure - 200/110 mm Hg. In the laboratory analysis of the blood: Hb - 90 g/L, blood creatinine - 850  $\mu$ mol/L, urine proteins - 1.0 g/L, leukocytes - 10-15 in the vision field. Glomerular filtration rate - 10 mL/min. What tactics should the doctor choose?

a. Transfer into the hemodialysis unit

b. Active conservative therapy for diabetic nephropathy

c. Transfer into the endocrinology clinic

d. Dietotherapy

e. Liver transplantation

704. A 20-year-old woman complains of headaches, vertigo, tearfulness, vomiting, pain in the area of the heart, and tachycardia. The signs appear 6-7 days before menstruation and disappear in the first

days of menstruation. Make the diagnosis:

- a. Stein-Leventhal syndrome
- b. Algomenorrhea
- c. Premenstrual syndrome**
- d. Diencephalic syndrome
- e. Metabolic craniopathy

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

- a. Evaluation tables
- b. Generalizing
- c. Determining the child's biological age
- d. Sigma deviations**
- e. Indices

706. A 40-year-old woman has been suffering from epilepsy since she was 15. Generalized epileptic seizures occur 2-3 times a month at night and are accompanied by involuntary urination and defecation. After a psychotrauma (her father's death), the attacks became more frequent and now occur every 2-3 minutes. The woman does not return to consciousness between the attacks, her pupils are unresponsive to light. What is the most likely diagnosis in this case?

- a. An increase in the number of grand mal seizures
- b. Epileptic psychosis
- c. Absence seizure
- d. Status epilepticus**
- e. Hysterical attack

707. Mother of a 5-year-old child noticed on the the head of her child a round "bald" spot 3 cm in diameter. All the hairs in the focus are broken off at the length of 5-6 mm. The day before the child was petting a stray cat. Make the diagnosis:

- a. Alopecia areata
- b. Superficial trichophytosis
- c. Psoriasis
- d. Deep trichophytosis
- e. Microsporia**

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

- a. Polycystic ovary syndrome**
- b. Ovarian cancer
- c. Turner syndrome
- d. Genital infantilism
- e. Genital tuberculosis

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

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

710. A 28-year-old woman, who had a severe mental trauma, complains of heavy bleeding that started on day 20 of her menstrual cycle and has been continuing for the last 2 weeks. Gynecological

examination shows that her external genitalia are properly developed. The cervix is cylindrical, clean, its external os is closed. The body of the uterus is of normal size, painless, mobile, dense, with a flat surface. The vaginal fornices are deep, the parametrium is free. Vaginal discharge is hemorrhagic and profuse. What is the most likely diagnosis in this case?

a. Dysfunctional uterine bleeding

b. Uterine myoma

c. Cervical cancer

d. Chorioepithelioma

e. Endometrial cancer

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

a. Second position, posterior type

b. First position, posterior type

c. Second position, anterior type

d. First position, anterior type

e. -

712. A 35-year-old man after an overexposure to cold developed complaints of frequent painful urination in small portions, elevated body temperature of  $38.6^{\circ}\text{C}$  that persists for 24 hours already, and chills. Digital rectal examination detects enlarged and painful prostate. Blood test shows leukocytosis of  $14.2 \cdot 10^9/\text{L}$ , while urinalysis detects leukocyturia of 20-25 in the vision field.

What is the most likely diagnosis in this case?

a. Gonorrhea

b. Acute cystitis

c. Bladder tumor

d. Prostatic hyperplasia

e. Acute prostatitis

713. After a surgery for a left thigh phlegmon the disease progression was complicated by sepsis. On the 7th day after the surgery there are marked signs of a generalized inflammatory reaction, in blood there are signs of toxic anemia and progressing hypoproteinemia, bilirubin levels are  $40 \text{ mcmol/L}$ , AST and ALT exceed the norm by 2.5 times. Oliguria persists (700 mL of urine per day). Name the phase of sepsis progression:

a. Mixed phase

b. Anabolic phase

c. Recovery phase

d. Stress phase

e. Catabolic phase

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

a. Autoimmune thyroiditis

b. Diffuse euthyroid goiter, II degree

c. Subacute thyroiditis

d. Thyroid cancer

e. Diffuse toxic goiter, II degree

715. An 18-year-old patient always obeys others and adapts his needs to the demands of the people on whom he depends. He excessively defers to their wishes and makes them responsible for his wellbeing, cannot defend his interests and needs support from other people. Such psychic profile has been formed in the childhood, remains unchanged, and hinders adaptation. What psychic disorder is

observed in this patient?

- a. Anankastic personality disorder
- b. Anxiety (avoidant) personality disorder
- c. Psychopathy-like state
- d. Dependent personality disorder**
- e. Markedly accentuated personality

716. A 38-year-old man's workplace is within the area of effect of ionizing radiation. During regular medical check-up he expresses no complaints. Blood test: erythrocytes -  $4,5 \cdot 10^{12}/l$ , Hb - 80 g/l, leukocytes -  $2,8 \cdot 10^9/l$ , platelets -  $30 \cdot 10^9/l$ . Can this person continue to work with sources of ionizing radiation?

- a. Only work with low-level radioactive substances is allowed
- b. Work with radioactive substances can be allowed after detailed medical examination
- c. Work with radioactive substances is allowed only for limited periods of time
- d. Work with radioactive substances is allowed

**e. Work with radioactive substances and other sources of radiation is contraindicated**

717. A 45-year-old man, provisionally diagnosed with a transient ischemic attack, was brought by an ambulance from an aniline-producing factory. Objectively, his skin and mucosa are cyanotic. His speech is dysarthric. The man is disoriented in space. His blood test shows the following: erythrocytes -  $4,6 \cdot 10^{12}/L$ , Hb - 143 g/L, color index - 0.9, leukocytes -  $5,6 \cdot 10^9/L$ , Heinz bodies - 14%, reticulocytes - 18%, methemoglobin - 36%, ESR - 5 mm/hour. The patient was diagnosed with a moderately severe acute aniline intoxication. What antidote agent will be the most effective in this case?

- a. Desferal (Deferoxamine)
- b. Sodium thiosulfate
- c. Pentacin (Calcium trisodium pentetate)
- d. Succimer

**e. Methylene blue**

718. A 65-year-old man underwent a left hemicolectomy due to a malignant tumor in the descending colon. On the 4th day after the surgery he developed pain and edema in his left shin. The Homans sign is positive on the left. What postoperative complication developed in this patient?

- a. Acute disturbance of the cerebral blood flow
- b. Acute postoperative thrombosis of the popliteal artery on the left
- c. Acute postoperative lymphangitis of the left shin
- d. Postoperative allergic reaction

**e. Acute postoperative thrombosis of the deep veins in the left shin**

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

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

**e. Dairy products**

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

- a. Oxytocin

**b. Dexamethasone**

- c. Progesterone
- d. Misoprostol
- e. Gynipral (hexoprenaline)

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

- a. Stress
- b. Sensitivity to weather changes

c. Age (over 40 years), sex, hereditary predisposition

d. Excessive emotional and nervous strain

e. Obesity

722. A 45-year-old man with thrombophlebitis of the deep veins in his legs suddenly after physical exertion developed sharp pain in his thorax on the right, dyspnea, and hemoptysis. Objectively his condition is severe; he presents with acrocyanosis, shortening of pulmonary percussion sound on the right, and weakened respiration. Respiration is 30/min., blood pressure is 110/80 mm Hg. ECG shows sinus tachycardia, heart rate is 120/min., electrical axis of the heart deviates to the right, S\_I-Q\_III.

What is the most likely diagnosis?

a. Cancer of the right lung

b. Right-sided exudative pleurisy

c. Community-acquired right-sided pneumonia

d. Pulmonary embolism

e. Spontaneous pneumothorax

723. A 15-year-old girl complains of delayed growth and absence of menstruations and secondary sexual characteristics. Objectively, she has the height of 153 cm, antimongoloid slant of the eyes, wide neck, wing-like folds on the neck (webbed neck), low line of hair growth on the neck. Her shoulder girdle prevails over the pelvic girdle, the mammary glands are not developed, pubic hair is absent. Uterine hypoplasia was detected. What is the most likely diagnosis in this case?

a. Turner syndrome

b. Hypogenitalism

c. Neurofibromatosis

d. Dwarfism

e. Klinefelter syndrome

724. A 58-year-old man, a heavy drinker and smoker, came to a hospital with complaints of constant coughing and shortness of breath. Lately, he has been losing weight. Objectively, his cervical lymph nodes are enlarged and dense, the tissues above them exhibit no tension. Chest X-ray shows fibrosis of an upper pulmonary lobe and left-sided pleurisy. The pleural fluid is straw-colored, with protein levels of 52 g/L and a high lymphocyte count. Malignant cells were not detected. Inoculation of the pleural fluid produced no microbial growth one week later. Make the diagnosis:

a. Sarcoidosis

b. Systemic lupus erythematosus

c. Atypical pneumonia

d. Bronchiectasis

e. Pulmonary tuberculosis

725. The mother of a newborn child suffers from chronic pyelonephritis and had a case of acute respiratory viral infection before giving birth. The delivery is full-term, the waters did not break for a long time. On the 2nd day of life the baby developed an erythematous rash. Later, blisters of about 1 cm in size appeared. They are filled with seropurulent contents and their lancing results in formation of erosions. The Nikolsky's sign is positive. The baby is inert and has a subfebrile body temperature. Make the diagnosis:

a. Vesiculopustulosis

b. Neonatal pemphigus

c. Sepsis

d. Ritter's disease of the newborn

e. Pseudofurunculosis

726. The characteristics of the microclimate at the industrial premises are as follows: average air temperature - +35°C, radiation temperature - +30°C, relative air humidity - 45%, air velocity - 3,0 m/s. What is the main type of heat transfer in such a microclimate?

a. Infrared radiation

b. Convection and conduction

c. Conduction

d. Convection

e. Evaporation

727. A 30-year-old woman complains of menstruations missing for a year. She has a history of a

massive postpartum hemorrhage. Objectively, her secondary sex organs are normally developed, the hair growth pattern is of the female type. Bimanual examination detects normal uterus and uterine appendages. What is a possible cause of amenorrhea in this case?

a. Hypothalamic insufficiency

**b. Pituitary necrosis**

c. Thyroid disorder

d. Adrenocortical necrosis

e. Ovarian insufficiency

728. A postparturient woman came to a doctor on the 14th day after giving birth. She complains of a sudden pain, hyperemia, and induration in her left breast, fever of  $39^{\circ}\text{C}$ , headache, and indisposition. Objectively, there is a fissure in the nipple, the left breast is enlarged, during its palpation the pain intensifies. What pathology can be suspected in this case?

**a. Lactational mastitis**

b. Breast cancer

c. Phlegmon of the breast

d. Fibroadenoma of the left breast

e. Suppurated cyst of the left breast

729. A 65-year-old man with acute anterior myocardial infarction developed an asphyxia attack. Examination detected diffuse cyanosis. In the lungs there are numerous heterogeneous wet crackles. Heart rate is 100/min. Blood pressure is 120/100 mm Hg. What complication occurred in this patient?

**a. Pulmonary edema**

b. Pulmonary embolism

c. Cardiogenic shock

d. Hypertensive crisis

e. Ventricular septal rupture

730. An 18-year-old patient complains of liquid foul-smelling discharge from her vagina, discomfort during sexual life. Her menstrual cycle is irregular. Examination of the external genitalia detects hyperemia and edema of the vulva. Examination in the mirrors shows that the vaginal mucosa is hyperemic, the cervix is clean, the discharge is profuse and foamy. What is the most likely diagnosis in this case?

**a. Trichomoniasis**

b. Chlamydiosis

c. Candidiasis

d. Gonorrhea

e. Nonspecific vaginitis

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

a. Vitamin therapy

b. Hormone therapy

c. Sunbathing

d. Antibiotic therapy

**e. Special diet**

732. A 57-year-old man, a miner, complains of a pain in his chest, dyspnea on physical exertion, excessive sweating, constant subfebrile temperature, and cough that produces blood-streaked sputum. He has been smoking for approximately 40 years (2 packs a day) and frequently has "pneumonias". Survey chest X-ray shows a triangular shadow in the middle lobe of the right lung. One of the apices of the shadow points to the lung root. Cardiac and mediastinal shadows are displaced toward the affected area. Make the provisional diagnosis:

a. Chronic bronchitis

b. Pneumoconiosis

c. Tuberculosis of the right lung

**d. Cancer of the right lung**

e. Right-sided pleuropneumonia

733. Two days after eating cold food, a 46-year-old man developed complaints of sharp pain in the throat and asphyxia. His respiration is noisy, respiratory rate - 26/min., temperature -  $39^{\circ}\text{C}$ .



Laryngoscopically, the glottis is not visible and obscured by edematous tissues. What urgent medical procedure must be performed in this case?

- a. Oxygen mask ventilation
- b. Intravenous administration of hormones
- c. Administration of antispasmodics

d. Tracheostomy

- e. Nasal cannulas with the oxygen flow of 4 L/min

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

- a. Typhus
- b. Infectious mononucleosis

c. Leptospirosis

- d. Brucellosis
- e. Measles

735. A 35-year-old patient complains of weakness, excessive sweating, fatigability, pain in the right side during breathing, and a fever of 38°C. Objectively, the following is observed: respiratory rate - 28/min., pulse - 100/min. The right half of the chest lags behind during the act of breathing. Voice tremor is not conducted on the right. Percussion detects a dull sound, breathing is weakened. The borders of the heart are shifted to the left. Complete blood count: leukocytes -  $12 \cdot 10^9/L$ , band neutrophils - 13%, lymphocytes - 13%, ESR - 38 mm/hour. What is the most likely diagnosis in this case?

- a. Infiltrative tuberculosis
- b. Right-sided pneumonia
- c. Pneumothorax

d. Exudative pleurisy

- e. Lung atelectasis

736. A secundipara woman developed bloody discharge from the vagina at the onset of the full-term delivery. Internal obstetric examination detected the following: the cervix is smoothed out, its external os is 6 cm wide, while its internal os is obstructed with a spongy tissue by 1/3. The amniotic sac is palpable through the rest of the cervical opening. The labor is active. What tactics should be chosen in this case?

a. Amniotomy

- b. Hemostatic therapy
- c. Termination of the pregnancy
- d. Cesarean section
- e. Stimulation of the labor activity

737. A 34-year-old man complains of pale edema of the face, feet, shins, and lumbar area, elevated blood pressure up to 160/100 mm Hg, and general weakness. He has a clinical history of nonspecific ulcerative colitis. Objectively: pulse - 84/min., rhythmic, blood pressure - 165/100 mm Hg; edemas all over the body; the skin is pale and dry, with low turgor. The kidneys cannot be palpated, on an attempt to palpate them they are painless. Blood test: erythrocytes -  $3.0 \cdot 10^{12}/L$ , Hb- 100 g/L, erythrocyte sedimentation rate - 50 mm/hour. Urinalysis: proteins - 3.5 g/L, erythrocytes - 7-10 in the vision field, leukocytes - 5-6 in the vision field. Daily proteinuria - 6 grams. What analysis should be conducted additionally to verify the diagnosis?

a. Gingival biopsy for the diagnosis of amyloid disease

- b. Survey and excretory urography
- c. Radioisotopic examination of kidneys
- d. Renal ultrasound
- e. Urinalysis for Bence-Jones protein

738. 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. Isoniazid
- b. Rifampicin
- c. Streptomycin**
- d. Vitamin C
- e. Pyrazinamide

739. A 32-year-old woman complains of tumor-like formation on the anterior surface of her neck that appeared 2 years ago. Within the last 3 months the tumor has been rapidly growing. It hinders swallowing and impairs speech; the tumor causes a sensation of pressure. Objectively the skin moisture is normal, pulse is 80/min., rhythmic, blood pressure is 130/80 mm Hg. In the right lobe of the thyroid gland there is a dense lumpy node 3.0x3.5 cm that moves during swallowing. Scanning image shows a "cold nodule" in the thyroid gland. Make the provisional diagnosis:

- a. Thyroid cyst
- b. Autoimmune thyroiditis

**c. Thyroid cancer**

- d. Nodular goiter
- e. Thyroid adenoma

740. A 5-year-old boy has been hospitalized unconscious. According to his parents, the child has a 2-year-long history of severe decompensated type 1 diabetes mellitus. Objectively, the skin is dry, its turgor is reduced, there is a smell of acetone from the oral cavity, Kussmaul breathing is observed. Blood pressure - 100/60 mm Hg, heart rate - 100/min. Blood glucose - 16.4 mmol/L. What type of coma has developed in the child?

- a. Cerebral coma
- b. Hypoglycemic coma
- c. Hyperosmolar coma

**d. Ketoacidotic coma**

- e. Lactic acid coma

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

- a. Pelvic X-ray
- b. Metrosalpingography
- c. Pneumogynecography

**d. Ultrasound**

- e. Thermography

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

- a. Trichuris

**b. Trichinella**

- c. Ascarididae
- d. Leptospira
- e. Echinococci

743. A 20-year-old woman has been hospitalized with complaints of a fever of 38.5°C, excessive sweating, pain in her lumbar region and abdomen on the right, headache, and general weakness. Objectively, the sign of costovertebral angle tenderness is positive on the right (Pasternatski's sign). Complete blood count: hemoglobin - 115 g/L, erythrocytes -  $3.9 \cdot 10^{12}/L$ , leukocytes -  $15.2 \cdot 10^9/L$ , ESR - 28 mm/hour. General urinalysis: urine color - light yellow, specific gravity - 1018, protein - 0.42 g/L, leukocytes - 15-20 in sight, cylinders (casts) - 3-5 in sight, bacteria - "++". What is the most likely provisional diagnosis in this case?

- a. Acute adnexitis
- b. Acute pyelonephritis**
- c. Acute cholecystitis

- d. Acute appendicitis
- e. Acute pancreatitis

744. A 17-year-old boy has been diagnosed with Prasad's syndrome. It is characterized by short stature, sexual underdevelopment, enlargement of the liver and spleen, and iron-deficiency anemia. This health condition is caused by the insufficient content of a certain microelement in the diet. Name this microelement.

- a. Copper
- b. Iodine
- c. Selenium

d. Zinc

- e. Iron

745. A 25-year-old woman complains of menstruation retention lasting for 3 years. The patient explains it by a difficult childbirth complicated with profuse hemorrhage, weight loss, brittleness and loss of hair, loss of appetite, depression. Objective examination reveals no pathologic changes of uterus and uterine appendages. What pathogenesis is characteristic of this disorder?

- a. Hyperproduction of prolactin
- b. Hyperproduction of androgen

c. Decreased production of gonadotropin

- d. Hyperproduction of estrogen
- e. Decreased production of progesterone

746. 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 sanguino-serous, moderate in volume. Assess the dynamics of uterine involution:

- a. Pathologic involution
- b. Subinvolution

c. Physiological involution

- d. Lochiometra
- e. Hematometra

747. During regular medical examination a lyceum student presents with signs of cheilitis that manifests as epithelial maceration in the area of lip seal. The lips are bright-red, with single vertical cracks covered with brown-red scabs. These clinical signs are most likely caused by insufficient content of the following in the diet:

- a. Retinol
- b. Calciferol

c. Riboflavin

- d. Ascorbic acid
- e. Thiamine

748. A boy had a foreign body removed from under his nail plate. 3 days later he developed a sharp throbbing pain at the end of his distal phalanx, which intensifies when the phalanx is pressed, hyperemia of the nail fold, elevated body temperature up to  $38.5^{\circ}\text{C}$ , and nail plate discoloration. Make the diagnosis:

a. Subungual paronychia

- b. Abscess
- c. Erysipelas
- d. Erysipeloid
- e. Paronychia

749. Twenty-four hour ECG monitoring has recorded 26 supraventricular extrasystoles in a 23-year-old patient. What would be the further doctor's tactics in this case?

a. No pharmacological correction is needed

- b. Intravenous administration of amiodarone
- c. Intravenous administration of a beta-blocker
- d. Calcium channel antagonist, administered orally

e. Vagus nerve testing

750. A 43-year-old man complains of a protrusion in the right inguinal region, that enlarges due to strain. He has been presenting with this condition for 6 months. Within this period the protrusion has grown. Objectively in the right inguinal region an elastic protrusion 8x5 cm is visible. On palpation it disappears, leaving an empty space 4x4 cm between the pedicles of the Poupart ligament. "Cough push" sign is positive over this opening. Make the diagnosis:

- a. Right-sided reducible inguinal hernia
- b. Right-sided reducible arcuate line hernia
- c. Cyst of the right spermatic cord
- d. Right-sided reducible femoral hernia
- e. Right-sided inguinal lymphadenitis

751. A 42-year-old woman suffers from micronodular cryptogenic cirrhosis of the liver. During the last week, her condition deteriorated: she developed seizures and clouded consciousness, her jaundice intensified. What test can help find the cause of deterioration in this patient's condition?

- a. Alkaline phosphatase levels
- b. Serum ammonia levels
- c. Cholesterol ethers
- d. ALT and AST levels
- e. alpha-fetoprotein levels

752. A 72-year-old man has been brought into a vascular surgery department with complaints of pain and chills in his legs. Ultrasound of his leg arteries shows atherosclerotic lesions of the vascular wall. What diagnostic method is necessary to determine the localization and the extent of the pathologic process in this case?

- a. X-ray of the extremities
- b. ECG
- c. Thermometry
- d. Angiography
- e. Chest X-ray

753. A 50-year-old man complains of general weakness, dizziness, periodical episodes of unconsciousness, and an intense pain in the small of his back and right subcostal region. These signs appeared after an accident at a paint factory, where he works. His skin is earth-gray and his sclerae are icteric. He has acrocyanosis. His blood pressure is 100/60 mm Hg. His heart sounds are muffled. His liver is +3 cm and has a dense edge. Blood test shows the following: erythrocytes -  $2.0 \cdot 10^{12}/L$ , Hb - 90 g/L, Heinz-Ehrlich bodies, leukocytes -  $5.6 \cdot 10^9/L$ , ESR - 15 mm/hour, methemoglobin - 62%, total bilirubin - 84.0  $\mu\text{mol}/L$ , indirect bilirubin - 71.7  $\mu\text{mol}/L$ . What is the most likely diagnosis in this case?

- a. Acquired hemolytic anemia
- b. Acute viral hepatitis
- c. Acute toluene poisoning
- d. Acute aniline poisoning
- e. Chronic cyanide poisoning

754. A 45-year-old woman complains of an induration in her left breast. Objectively, in the upper-outer quadrant of her left mammary gland, she has a tumor-like formation approximately 2.5 cm in diameter without clear contours. The formation is mobile and painless. The "lemon rind" sign is positive. In the left axillary region, there is a lymph node enlarged to 1.5 cm. What is the most likely diagnosis in this case?

- a. Breast cancer
- b. Non-lactational mastitis
- c. Breast abscess
- d. Breast fibroadenoma
- e. Lipogranuloma

755. A 30-year-old patient, who has been suffering from headaches, suddenly developed extreme headache after lifting a heavy load, as if he had been hit over the head. Nausea, vomiting, and slight dizziness are observed. In a day he developed pronounced meningeal syndrome and body temperature up to  $37.6^{\circ}\text{C}$ . A doctor suspects subarachnoid hemorrhage. What additional

examination is necessary to confirm this diagnosis?

- a. Computed tomography of the brain
- b. Rheoencephalography

**c. Lumbar puncture with investigation of the spinal fluid**

- d. Angiography of the brain vessels
- e. Skull X-ray

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

- a. Acute adenoiditis
- b. Acute maxillary sinusitis

**c. Allergic rhinitis**

- d. Acute rhinitis
- e. Recurrent respiratory disease

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

- a. Apply a clamp to the bleeding vessel
- b. Apply a tourniquet below the site of the bleeding
- c. Apply an arterial tourniquet to the thigh

**d. Apply a tight bandage to the wound**

- e. Press the femoral artery with your finger

758. A 38-year-old man has been for many years suffering from epilepsy. Three days ago he had an episode of clouded consciousness that started suddenly and was accompanied by anger. In this state he was speaking nonsense, breaking furniture, and hit his wife. He remained in this state for about an hour, after which he fell asleep. Later he was claiming that he didn't remember any of the events that had happened during the episode. What is the most likely definition of this condition?

- a. Amentive state

**b. Twilight state**

- c. Fugue state
- d. Ambulatory automatism
- e. Trance

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

- a. Cushing's disease
- b. Primary hyperaldosteronism
- c. Acute pyelonephritis
- d. Diabetes mellitus

**e. Diabetes insipidus**

760. What medical professional can be involved in the examination of a dead body at the scene of an accident by the investigator, if a forensic medical expert is unavailable?

- a. Only a surgeon or an anesthesiologist
- b. Only an anatomical pathologist
- c. Only a family doctor or an anatomical pathologist

**d. Any doctor**

- e. Only a therapist or an anatomical pathologist

761. A 65-year-old patient complains of frequent painful urination, moderate weight loss observed over the last 3-4 months, and massive macrohematuria with excretion of shapeless blood clots. According to the patient's medical history, macrohematuria first appeared 3 months ago with no apparent cause and was not accompanied by pain and dysuria back then, a few days later the bleeding stopped on its own. What is the most likely diagnosis in this case?

**a. Bladder tumor**

- b. Acute cystitis
- c. Kidney tumor
- d. Chronic cystitis
- e. Urolithiasis

762. A 20-year-old woman complains that for the last three years she has been observing a cold feeling in her fingers. First they turn bluish-white and numb and then 5-10 minutes later the skin becomes red and the fingers warm up, which is accompanied by sharp pain. What is the most likely diagnosis in this case?

- a. Obliterating endarteritis
- b. Thromboangiitis obliterans (Buerger disease)
- c. Polyneuritis
- d. Arteriosclerosis obliterans

**e. Raynaud syndrome**

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

- a. Psoriasis
- b. Tinea versicolor

**c. Microsporia**

- d. Systemic lupus erythematosus
- e. Scabies

764. A patient 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 tuberculosis
- b. Prostate sclerosis
- c. Chronic congestion prostatitis

**d. Prostate cancer**

- e. Urolithiasis, prostaticolith of the right lobe

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

- a. Infliximab
- b. Diclofenac sodium
- c. Meloxicam
- d. Methylprednisolone

**e. Methotrexate**

766. During the transfusion of 400 mL of packed erythrocytes, a 35-year-old man developed general anxiety, short-term agitation, lumbar and retrosternal pain, dyspnea, cyanosis, and tachycardia of 110/min. His blood pressure decreased to 90/40 mm Hg. What is the most likely diagnosis in this case?

- a. Allergic reaction

**b. Hemotransfusion shock**

- c. Citrate intoxication
- d. Massive transfusion syndrome
- e. Pulmonary thromboembolism

767. A 29-year-old woman complains of a general weakness, increased fatigability, weight loss, and infrequent scanty periods. One year ago she had a childbirth, complicated with a massive bleeding. Objectively, the woman is asthenic, her skin is pale and dry, the hair cover is thin on her scalp and



absent in her armpits. Her mammary glands and genitals are hypotrophic. Make the provisional diagnosis:

- a. Pituitary tumor
- b. Asthenoneurotic syndrome
- c. Sheehan's syndrome**
- d. Hypoplastic anemia
- e. Anorexia nervosa

768. In the morning, an 8-year-old girl started complaining of general weakness and pain during swallowing. At midday, her parents called for a doctor, because the girl's weakness was progressing and she developed a bilateral swelling slightly below and in front of her ears. Make the diagnosis:

- a. Lymphadenopathy
- b. Dermoid cysts
- c. Tumor of the carotid body
- d. Mumps**
- e. Tumor of the salivary glands

769. A 55-year-old woman came to a doctor with complaints of a heavy sensation in her left shin and periodical cramps of the gastrocnemius muscles that occur at night. She has been suffering from this condition for 5 years, since the moment when these signs first appeared. Her condition has been remaining untreated all this time. Objectively, on the medial surface of the left shin and thigh there are dense subcutaneous varicose veins that are painless on palpation. Make the diagnosis:

- a. Acute thrombosis of the deep veins in the left leg
- b. Acute ascending thrombophlebitis of the subcutaneous veins in the left leg
- c. Post-thrombotic syndrome in the left leg
- d. Arteriosclerosis obliterans of the vessels in the left leg
- e. Subcutaneous varicose veins in the left leg**

770. Daily diet of a 10-year-old girl contains the following: vitamin B<sub>1</sub> - 1.2 mg, vitamin B<sub>2</sub> - 0.6 mg, vitamin B<sub>6</sub> - 1.4 mg, vitamin PP - 15 mg, vitamin C - 65 mg. Assessment of the girl's nutrition status reveals that she has cheilosis, glossitis, angular cheilitis, and conjunctivitis. The girl is likely to have:

- a. Vitamin B<sub>1</sub> hypovitaminosis
- b. Vitamin C hypovitaminosis
- c. Vitamin PP hypovitaminosis
- d. Vitamin B<sub>6</sub> hypovitaminosis
- e. Vitamin B<sub>2</sub> hypovitaminosis**

771. A 2-year-old child with persisting cough and subfebrile body temperature after a case of URTI developed dyspnea, cyanosis of the nasolabial triangle, percussion dullness and weakened respiration in the lower lobe of the right lung, and a slight mediastinal displacement to the left. What pulmonary pathology is likely to cause this clinical presentation?

- a. Pleurisy**
- b. Bronchitis
- c. Pneumonia
- d. Atelectasis
- e. Emphysema

772. On the day 4 after the cesarean section a woman developed fever with body temperature up to 39°C and abdominal pain. Pulse - 104/min. She vomited twice. The patient is sluggish, her tongue is dry and has gray coating. The abdomen is distended. Signs of peritoneal irritation are positive in all segments. Peristalsis cannot be auscultated. No passage of gas occurs. Uterine fundus is located at the level of the navel. The uterus is painful on palpation. The discharge is moderate and contains blood and pus. What is the most likely diagnosis?

- a. Parametritis
- b. Progressive thrombophlebitis
- c. Pelvic peritonitis
- d. Metroendometritis
- e. Diffuse peritonitis**

773. A 26-year-old woman was hospitalized into the gynecological department with complaints of body temperature up to 38.2°C, fever, general weakness, and dirty-red blood discharge from her

genital tracts. She is hemodynamically stable. Two days ago she underwent a medical abortion on the 8th week of pregnancy. Ultrasound detects the remains of the fertilized egg in her uterine cavity.

What are the tactics of the patient management in this case?

- a. Laparotomy. Extirpation of the uterus and tubes. Abdominal drainage
- b. Pipelle biopsy
- c. Uterine cavity treatment with antibiotic solutions
- d. Laparotomy. Supravaginal uterine amputation. Abdominal drainage
- e. Revision of the uterine cavity with vacuum aspirator. Antibiotic therapy**

774. An 18-year-old young man during hospitalization complains of general weakness, body temperature of  $37.5^{\circ}\text{C}$ , loss of appetite, nausea, heaviness in the right subcostal region, and discolored stool and urine. The disease onset was 5 days ago. Objectively, his skin and sclerae are slightly icteric. The liver protrudes by 3 cm and is tender to palpation. Patient's urine is dark brown, while his stool is light-colored. He usually drinks water from a tap. What is the most likely diagnosis in this case?

- a. Typhoid fever
- b. Viral hepatitis A**
- c. Malaria
- d. Viral hepatitis B
- e. Leptospirosis

775. A 31-year-old drug-addicted person complains of a cough with bloody expectorations, dyspnea, persistent fever, and leg edemas. The jugular veins are distended. There is a coarse pansystolic murmur detected above the base of the xiphoid process and in the second intercostal space on the left, close to the edge of the sternum. Heart sounds are clear, arrhythmia is detected, heart rate is 128/min., pulse - 82/min., blood pressure is 100/70 mm Hg. What is the most likely diagnosis?

- a. Coarctation of the aorta
- b. Lutembacher syndrome
- c. Community-acquired pneumonia
- d. Pulmonary embolism
- e. Infective endocarditis**

776. A 32-year-old patient complains of reddening, burning, and sensation of a foreign body in the right eye. The disease is acute. On examination: visual acuity of the both eyes is 1,0. In the right eye there are hyperemia and swelling of the conjunctiva, superficial injection. There is purulent discharge in the conjunctival sac. The cornea is clear. The color and pattern of the iris are uncanged, the pupil is mobile. What diagnosis is most likely?

- a. Acute dacryocystitis
- b. Acute attack of glaucoma

**c. Acute conjunctivitis**

- d. Acute iridocyclitis
- e. Foreign body of the cornea

777. A 62-year-old patient has been hospitalized with complaints of intense retrosternal pain that lasts for one hour already and cannot be relieved with nitroglycerin. The patient suffers from angina pectoris, previously the attacks could be relieved with nitrates. The patient has no other diseases. Objectively, cyanosis of the lips is observed. Heart sounds are dull and rhythmic. ECG shows elevation of ST segment in leads V4-V6. What drug must be immediately administered to the patient?

- a. No-spa (Drotaverine)

**b. Actilyze (Alteplase)**

- c. Corglycon
- d. Dimedrol (Diphenhydramine)
- e. Analgin (Metamizole sodium)

778. Two weeks after an antibacterial therapy for a febrile illness, a 25-year-old woman developed severe watery diarrhea, colicky abdominal pain, and elevated body temperature. Proctosigmoidoscopy detects focal mucosal lesions with a pale yellow coating. What is the most likely diagnosis in this case?

- a. Ulcerative colitis
- b. Pseudomembranous colitis**

- c. Ischemic colitis
- d. Gastroenteritis
- e. Crohn's disease

779. A 29-year-old patient suffers from hormone-dependent bronchial asthma. Fluorography detects a round shadow of medium intensity with clear even contours in C2 of the right lung. Around the shadow, there are several polymorphic focal shadows. There is a calcination at the root of the lung. Examination detects a banbox resonance in the percussion sound over the lungs, diffuse dry crackles can be heard. Blood test detects no changes. Mantoux test reaction with 2 tuberculin units PPD-L resulted in a papule 22 mm in size. What is the most likely diagnosis in this case?

**a. Tuberculoma**

- b. Eosinophilic infiltration
- c. Aspergilloma
- d. Peripheral cancer
- e. Pneumonia

780. A 29-year-old woman complains of profuse bloody discharge from her genital tracts. She notes a three-month delay of menstruation. She has a history of one childbirth and one medical abortion. Vaginal examination detects a significant amount of hemorrhagic discharge with vesicles from the cervix, the body of the uterus is enlarged to 15-16 weeks of pregnancy, softened, painless. Both ovaries are enlarged, mobile, and painless. Chorionic gonadotropin in the blood - 200,000 units. What is the most likely diagnosis in this case?

- a. Cervical pregnancy
- b. Ectopic pregnancy

**c. Molar pregnancy**

- d. 12 weeks of pregnancy, spontaneous abortion in progress
- e. 12 weeks of pregnancy, threatened abortion

781. A 35-year-old man complains of a chest pain that persists for several months already and an occasionally observed bitter taste in his mouth. The pain is localized behind the sternum, occurs at rest, and sometimes irradiates into the neck. It does not intensify during physical exertion, but may intensify after drinking alcohol or eating a large meal. At night, this condition becomes worse. Swallowing is not disturbed. The body weight is increased. Examination detected no changes. Make the diagnosis:

- a. Esophageal tumor

**b. Gastroesophageal reflux disease**

- c. Globus hystericus
- d. Esophageal achalasia
- e. Diaphragmatic hernia

782. Over the last two years, a 23-year-old woman has been noticing coldness of her fingers that become bluish-white and numb. After 5-10 minutes, her skin becomes red and the fingers become warm, which is accompanied by sharp pain. What is the provisional diagnosis in this case?

- a. Obliterating endarteritis
- b. Arteriosclerosis obliterans
- c. Polyneuritis

**d. Raynaud's disease**

- e. Buerger's disease

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

- a. Manic episode
- b. Organic delirium
- c. Acute reaction to stress
- d. Depressive episode

**e. Paranoid schizophrenia**

784. An 11-year-old boy for a month has been presenting with increasing pain in the right femur. In

the painful area there is a non-mobile painful tumor with unclear margins. The child complains of general indisposition, weakness, increased body temperature up to  $39^{\circ}\text{C}$  X-ray shows widened medullary cavity, small foci of cancellous bone destruction, and onion-like lamellar exfoliation of the cortical layer. What is the most likely pathology resulting in such clinical presentation?

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

e. Chondrosarcoma

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

- a. Hypoplastic anemia
- b. Idiopathic thrombocytopenic purpura**
- c. Chronic iron-deficiency anemia
- d. Chronic lymphocytic leukemia
- e. Hemolytic anemia

786. During medical examination of students, the doctor noticed that an 18-year-old student had the height of 176 cm, the body weight of 68 kg, dry skin, and hyperkeratosis. Specialized examination revealed a significant decrease in the acuity of the student's twilight vision. What nutrient is deficient in this case, causing this health condition in the student?

- a. Vitamin C
- b. Vitamin A**
- c. Selenium
- d. Phosphorus
- e. Vitamin B<sub>1</sub>

787. A 25-year-old man suffers from a disease that manifests with fever and vesicular rash that appears mostly on the trunk and scalp. On the 10th day after the onset of the disease, he developed an intense headache, vomiting, ataxia, sluggishness, discoordination of movements, limb tremor. He was diagnosed with encephalitis. This condition is the complication of the following disease:

- a. Vesicular rickettsiosis
- b. Rubella
- c. Scarlet fever
- d. Measles
- e. Chickenpox**

788. A 56-year-old woman was diagnosed with stage 2 hypertension of the 2nd degree. She belongs to the group of moderate risk and has bronchial asthma. What group of drugs is CONTRAINDICATED to this patient?

- a. Diuretics
- b. Calcium antagonists
- c. Imidazoline receptor antagonists
- d. Angiotensin-converting enzyme inhibitors
- e. beta-blockers**

789. A 3-year-old child presents with sharp deterioration of his general condition. He has a history of purulent otitis. His temperature is now  $38.5^{\circ}\text{C}$  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. Hygroma of the knee
- b. Osteogenic sarcoma
- c. Rheumatoid arthritis

d. Left hip fracture

**e. Epiphyseal osteomyelitis on the left**

790. A newborn child has been diagnosed with physiological jaundice. What symptom is characteristic of this health condition?

a. Jaundice, appearing within the first 24 hours of life

b. Colorless feces

**c. Yellow color of the skin, appearing on day 2-3 of life**

d. Jaundice that lasts more than 10 days

e. A recurrent increase in the intensity of jaundice

791. External obstetric examination shows the the mother's belly is ovoid; the fetal back can be palpated in the left lateral portion of the uterus, in the right portion there are fetal small parts, and at the uterine fundus there is a firm balloting part. Fetal heartbeat can be heard on the left, above the navel. What are the lie, position, and presentation of the fetus?

a. Longitudinal lie, position II, breech presentation

b. Transversal lie, position I, no presenting part

c. Longitudinal lie, position I, cephalic presentation

**d. Longitudinal lie, position I, breech presentation**

e. Longitudinal lie, position II, cephalic presentation

792. A woman has undergone a surgery for diffuse toxic goiter, degree II. Twelve hours after the surgery, she developed complaints of hoarseness and voice loss, problems with breathing, dyspnea, and anxiety. Her post-surgery wound is normal. What complication developed in this woman?

a. Thyrotoxic crisis

b. Hypoparathyroidism

c. Postoperative bleeding

**d. Recurrent laryngeal nerve paresis**

e. Tracheal injury

793. An 8-year-old girl complains of frequent painful urination in small amounts and urinary incontinence. The signs have been present for 2 days already. She explains her disease by overexposure to cold. Costovertebral angle tenderness is absent. Complete blood count is without pathologies. Urine test: leukocytes - 20-30 in the vision field, erythrocytes - 40-50 in the vision field, unchanged, bacteriuria. What is the most likely diagnosis?

a. Pyelonephritis

b. Glomerulonephritis

c. Urolithiasis

d. Vulvitis

**e. Cystitis**

794. A 45-year-old man, a farmer, presents with acute onset of a disease. He complains of headache, high temperature, pain in the gastrocnemius muscles, icteric face, and dark urine. Objectively: body temperature -  $38^{\circ}\text{C}$ , blood pressure - 100/70 mm Hg, conjunctival hemorrhages, hepatosplenomegaly, and oliguria. What is the most likely provisional diagnosis?

a. Viral hepatitis

**b. Leptospirosis**

c. Pseudotuberculosis

d. Brucellosis

e. Trichinosis

795. A 56-year-old woman has been working as a disinfectant for 19 years. She complains of general weakness, nausea, bitter taste in her mouth, heavy sensation in her right subcostal area, and rapid fatigability. Objectively, her body temperature is  $37.1^{\circ}\text{C}$ , the sclerae are icteric, and the liver is enlarged. Total bilirubin is 40  $\mu\text{mol/L}$ . What is the likely diagnosis?

a. Biliary dyskinesia

b. Acute cholecystitis

**c. Occupational toxic hepatitis**

d. Chronic pancreatitis

e. Chronic cholecystitis

796. A 76-year-old patient complains of difficulty urinating at night, with urination occurring up to 3

times, and a feeling of incomplete emptying of the bladder. This condition has been observed for 2 years already. Objectively, after the act of urination, percussion detects dullness over the pubis. The sign of costovertebral angle tenderness (Pasternatski's sign) is negative. The external genitalia are normal. Rectal examination detects that the prostate is enlarged to 2-3 times of its normal size, smooth, elastic, symmetrical, with clear contours. The intestinal mucosa is mobile over the prostate. What is the most likely diagnosis in this case?

- a. Prostate abscess
- b. Prostate adenoma**
- c. Prostate cancer
- d. Chronic prostatitis
- e. Prostate tuberculosis

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

- a. Pericarditis
- b. Thromboembolism of pulmonary artery branches**
- c. Myocardial infarction
- d. Pleurisy
- e. Croupous pneumonia

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

- a. Intestinal tumor
- b. Coprostasis
- c. Helminthiasis
- d. Peritonitis

**e. Hirschsprung's disease**

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

- a. Bacterial culture
- b. Skin scraping for mycosis
- c. Eosinophil count
- d. Smear for acantholytic cells

**e. ~~emph~~Treponema pallidum test**

800. An ambulance was called to a 45-year-old man. According to his family, the onset of the disease was sudden, after he returned from a ski resort. His body temperature increased up to  $38.7^{\circ}\text{C}$ , he developed headache and vomiting. Objectively, his skin is pale with a cyanotic tint, there is a thick hemorrhagic rash all over the body, sometimes with necrosis in the center. Blood pressure is 45/0 mm Hg, pulse is 126/min., low volume. The patient has marked nuchal rigidity and positive Kernig's sign. Make the provisional diagnosis:

**a. Meningococcal infection**

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

801. A 35-year-old woman complains of frequent, painful, difficult urination, constant urges to urinate, and several drops of blood appearing in her urine at the end of the process. She fell ill suddenly, after



overexposure to cold, when the complaints above appeared. Body temperature -  $36.6^{\circ}\text{C}$ . During palpation, pain is observed in the area of the urinary bladder. Ultrasound shows a small amount of urine in the bladder, the walls of the bladder are edematous and uniformly thickened. Urinalysis detects leukocyturia (30-40 in sight), proteinuria (0.099 g/L), and erythrocytosis (5-7 unchanged erythrocytes). What is the most likely diagnosis in this case?

- a. Bladder tumor
- b. Acute cystitis**
- c. Bladder concrement
- d. Acute salpingo-oophoritis
- e. Ureterocele

802. A 43-year-old man, a coal-face worker with 15-year-long record of work, complains of cough, thoracic pain, and dyspnea. The cough is mild, usually dry, occurs mostly in the morning. The pain is localized in the interscapular region and aggravates during a deep intake of breath. Dyspnea occurs during physical exertion. Vesicular respiration in the lungs is weakened. Heart sounds are rhythmic, heart rate is 86/min., blood pressure is 135/80 mm Hg. The abdomen is soft and painless. X-ray shows micronodular pulmonary fibrosis. Make the provisional diagnosis:

- a. Metal pneumoconiosis
- b. Byssinosis
- c. Berylliosis
- d. Siderosis

**e. Carboconiosis**

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

- a. -
- b. Scalp phlegmon
- c. Vesiculopustulosis

**d. Pseudofurunculosis**

e. Pemphigus

804. A 78-year-old man with a prostate adenoma underwent a herniotomy for a direct inguinal hernia. After the surgery he presents with absent urination. Enlarged urinary bladder is detectable above the patient's pubis. What measures should be taken in this case?

- a. Prescribe proserin (neostigmine) intramuscularly
- b. Bladder catheterization**
- c. Apply cold to the urinary bladder area
- d. Prescribe antispasmodics subcutaneously
- e. Prescribe processing of the postoperative wound with UHF field

805. A 43-year-old patient, who had inhalation poisoning the day before, was diagnosed with acute respiratory distress syndrome. What parameter must be used to assess the severity of the patient's illness?

- a. Respiratory volume
- b. Partial pressure of oxygen in arterial blood
- c. Central venous pressure
- d. Arterial oxygen saturation

**e. Respiratory index (oxygenation index)**

806. A 32-year-old woman complained of a sudden piercing headache and fell down unconscious. In an ambulance, an emergency physician noted her severe condition, sopor, and meningeal syndrome. After her hospitalization, the lumbar puncture yielded bloody cerebrospinal fluid. Her cerebrospinal fluid pressure is 260 mm H<sub>2</sub>O. Make the provisional diagnosis:

- a. Ischemic stroke
- b. Aneurysm rupture, subarachnoid hemorrhage**
- c. Traumatic brain injury
- d. Meningioma
- e. Meningoencephalitis

807. A 24-year-old woman diagnosed with postoperative hypothyroidism came to a doctor with complaints of palpitations, irritability, excessive sweating, and disturbed sleep. During the last month she has been undergoing treatment with levothyroxine in the dose of 150 mcg once a day. What would be the further treatment tactics in this case?

- a. Reduce the dose of levothyroxine
- b. Add Mercazolil (Thiamazole) to the treatment
- c. Prescribe beta-blockers
- d. Prescribe sulfonylurea drugs
- e. Increase the dose of levothyroxine

808. Fluorography of a 45-year-old man detects a few foci of low intensity with blurred margins on the apex of his right lung. This sign is observed for the first time. The patient's condition causes him no discomfort. He has a many-year history of smoking. Objectively, percussion produces a pulmonary sound above the lungs, the respiration is vesicular, auscultation detects no wheezing. Blood test findings are normal. Make the diagnosis:

- a. Focal pulmonary tuberculosis
- b. Bronchopneumonia
- c. Peripheral lung cancer
- d. Eosinophilic pneumonia
- e. Disseminated pulmonary tuberculosis

809. A district doctor has been tasked with preparation of a plan for a complex of treatment and prevention measures among the population in his district. What measures for secondary disease prevention should be included in this plan?

- a. Disease prevention
- b. Prevention of disease complications
- c. Rehabilitation measures
- d. Elimination of the causes of diseases
- e. Improving the living conditions of the population

810. A 26-year-old woman, pregnancy I, 10 weeks of gestation, has been suffering from rheumatism since her childhood. With pregnancy her condition has deteriorated: her dyspnea increased and she developed edema in her lower extremities. Her pulse is 86/min., the lips are cyanotic, there are systolic and diastolic murmurs over the cardiac apex. The liver protrudes 4 cm from under the costal margin. The woman was diagnosed with III degree heart failure, her left ventricular ejection fraction is less than 40%. What are the tactics of the patient management in this case?

- a. Medication-induced termination of the pregnancy
- b. Prolongation of the pregnancy with periodical treatment in the cardiology department
- c. Termination of the pregnancy with vacuum aspirator
- d. Termination of the pregnancy via minor cesarean section
- e. Prolongation of the pregnancy with periodical hospitalization into the obstetrical inpatient department during the critical periods

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

- a. Pneumonia
- b. Pulmonary embolism
- c. Dressler syndrome
- d. Cardiac asthma
- e. Recurrent myocardial infarction

812. In the inpatient gynecological unit within a year 6500 women underwent treatment. They spent there a total of 102000 bed-days. What indicator of the gynecological unit work can be calculated based on these data?

- a. Average bed occupancy rate per year
- b. Bed turnover rate

c. Number of beds by hospital department

d. Average length of inpatient stay

e. Planned bed occupancy rate per year

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

a. Acute rheumatic fever

b. Rheumatoid arthritis

c. Reactive arthritis

d. Systemic lupus erythematosus

e. Systemic scleroderma

814. A 35-year-old man was hospitalized with signs of surgical sepsis that has likely been caused by a large carbuncle in his scapular region. Examination detected secondary purulent foci in the liver and right lung. What stage of surgical sepsis is it?

a. Septicemia

b. Toxemia

c. Purulent resorptive fever

d. Septicopyemia

e. Terminal stage

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

a. Hemophilia A

b. Meningococcemia

c. Idiopathic thrombocytopenic purpura

d. Hemorrhagic vasculitis

e. DIC syndrome

816. A 46-year-old woman has diarrhea with abdominal distension, loss of body mass, and large amounts of porridge-like foul-smelling stool without blood streaks or tenesmus. Objective examination detects moderate tenderness in the mesogastrium and left abdominal flank. Feces analysis detects steatorrhea with neutral fat and creatorrhea. What prescription would be the most advisable in this case?

a. Multi-enzyme preparations

b. Cholinergic antagonists and antibacterial agents

c. Antacids and antispasmodics

d. Cholinergic antagonists

e. Metronidazole and loperamide

817. An agitated patient keeps trying to look behind the door and into the next room, because he is convinced that his friends are there. He claims that he hears a conversation between his friends and strangers, despite there being no one nearby. He tries to convince the doctor that arguing about "his punishment" is occurring behind the wall. He loudly repeats the phrases that he claims he has heard from behind the wall. What pathological condition is observed in the patient?

a. Confabulations

b. Verbal illusions

c. Intrusive thoughts

d. Delirium

e. Acute hallucinosis

818. A family doctor needs to prepare a plan for carrying out a complex of treatment and prevention measures among the population. What secondary prevention measures must be included in this plan?

a. Elimination of causative factors

b. Improvement of living conditions

- c. Implementation of rehabilitation measures
- d. Prevention of disease occurrence

**e. Prevention of disease complications**

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

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

- a. Symptomatic treatment
- b. Acyclovir treatment
- c. alpha-fetoprotein test
- d. Continued monitoring

**e. Termination of the pregnancy**

821. A 28-year-old woman complains of pain in her lower abdomen, more on the right, that intensifies during a menstruation. Smearing bloody discharge is observed before and after a menstruation. The woman has a 10-year-long history of infertility. Bimanual examination reveals that the uterus is dense, painless, and not enlarged. To the right of the uterus, a mass 7x8x6 cm in size with slightly limited mobility is palpable. The vaginal fornices are free, the discharge is mucous. What is the most likely diagnosis in this case?

- a. Cancer of the right ovary
- b. Endometrioid ovarian cyst on the right**

- c. Tumor of the ascending colon
- d. Right-sided adnexitis
- e. Uterine endometriosis

822. A 45-year-old man has been suffering from duodenal ulcer disease for 5 years. He complains of weakness, dizziness, dryness of the skin. Objectively: the skin and visible mucosa are pale, chapped lips; heart rate is 100/min., BP- 100/70 mm Hg, systolic murmur at all points on heart auscultation. All other internal organs are unchanged. Fecal occult blood test is positive. Blood test: erythrocytes -  $3,1 \cdot 10^{12}/l$ , Hb- 88 g/l, color index - 0,7, leukocytes -  $4,6 \cdot 10^9/l$ , platelets -  $350 \cdot 10^9/l$ , ESR- 21 mm/hour, anisocytosis, poikilocythemia, serum iron - 9,5 mcmol/l. What treatment tactics would you choose?

- a. Ascorbic acid, calcium chloride
- b. Corticosteroids, cytostatics

**c. Iron preparations, balanced diet**

- d. Concentrated red cells transfusion
- e. Intramuscular introduction of 500 mkg of cyanocobalamin

823. A 68-year-old man diagnosed with acute myocardial infarction is in an intensive care unit. Suddenly he fell unconscious. Objectively, his pulse and blood pressure cannot be detected. ECG shows frequent irregular waves of varying shape and amplitude. What complication occurred in this patient?

- a. Asystole
- b. Acute heart failure
- c. Paroxysmal ventricular tachycardia
- d. Pulmonary embolism

**e. Ventricular fibrillation**

824. A 35-year-old patient complains of intense constant pain in the cardiac region. The patient had a case of influenza one week ago. Objectively, the patient's condition is satisfactory, body temperature

- 37.8°C, blood pressure - 130/80 mm Hg, pulse - 88/min., rhythmic. The borders of the heart are unchanged. A biphasic murmur can be heard in the III-IV intercostal space on the left, the heart sounds are sonorous. ECG shows concordant elevation of the ST segment. What is the most likely diagnosis in this case?

- a. Pulmonary thromboembolism
- b. Myocarditis

**c. Acute pericarditis**

- d. Angina pectoris
- e. Myocardial infarction

825. A woman complains of a persistent increase in her blood pressure to 160-180/95-100 mm Hg and weight gain of 8 kg. Examination detects a purple-cyanotic tint of the skin of her face and back and emphysematous rubrae on the skin of her abdomen. Laboratory blood test: glucose - 8.3 mmol/L, leukocytes -  $9.1 \cdot 10^9/L$ . Make the provisional diagnosis.

- a. Conn syndrome

**b. Cushing disease**

- c. Essential hypertension
- d. Pheochromocytoma
- e. Secondary arterial hypertension

826. A 12-year-old girl became acutely ill with a fever of  $38.5^{\circ}C$  and a rash appearing on her skin. Objectively, her condition is of moderate severity, she has hepatosplenomegaly, fine punctate rash and maculopapular rash on the flexor surfaces of her limbs, lateral surfaces of the trunk, and lower abdomen. Demarcated bluish-pink coloring is observed on her hands and feet. What is the most likely diagnosis in this case?

**a. Pseudotuberculosis**

- b. Measles
- c. Chickenpox
- d. Scarlet fever
- e. Infectious mononucleosis

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

- a. Berylliosis

**b. Saturnism**

- c. Mercurialism
- d. Asbestosis
- e. Siderosis

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

- a. Dühring's disease (dermatitis herpetiformis)
- b. Nonacantholytic pemphigus
- c. Toxicodermia
- d. Herpes

**e. Acantholytic pemphigus**

829. After semolina was introduced into the diet, a 1-year-old child for 2 months has been presenting with loss of appetite, irritability, loss of body mass, and loss of previously learned skills. The feces are copious and foul-smelling. The skin is pale and dry, the hair is brittle. The abdomen is distended, while the limbs are thin. Stool test shows high levels of fatty acids. What is the most likely diagnosis?

- a. Irritable bowel syndrome
- b. Mucoviscidosis
- c. Lactase deficiency
- d. Functional diarrhea

**e. Celiac disease**

830. A 30-year-old woman lives with a husband diagnosed with typhus. Both of them have an

infestation of body lice. What drug must be used for emergency prevention of epidemic typhus in the woman?

- a. Human immunoglobulin
- b. Hyperimmune equine serum
- c. Inactivated typhus vaccine

**d. Doxycycline**

- e. Live typhus vaccine

831. A 78-year-old woman complains of lumbar pain. The pain increases during movements, decreases at rest, and does not irradiate to other areas. Her temperature is normal, the body weight remains unchanged. Objectively, her peripheral joints are normal, she has moderate obesity, the mobility of the lumbar spine is limited. A local tension is observed in the soft tissues over the L2 vertebra. In the blood: Hb - 147 g/L, leukocytes -  $8.8 \cdot 10^9/L$ , platelets -  $222 \cdot 10^9/L$ , ESR - 5 mm/hour,  $Na^+$  - 140 mmol/L,  $K^+$  - 4.2 mmol/L,  $Ca^{2+}$  - 2.35 mmol/L. Make the diagnosis:

- a. Multiple myeloma

**b. Osteoporosis with a pathological fracture**

- c. Secondary hyperparathyroidism
- d. Sciatica
- e. Amyloidosis

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

- a. Frequent ventricular extrasystoles
- b. Paroxysmal supraventricular tachycardia

**c. Paroxysmal ventricular tachycardia**

- d. Ventricular fibrillation
- e. Atrial fibrillation

833. After manual repositioning of bone fragments and application of a plaster splint, a patient with forearm fractures developed edema, pain, and disturbed sensitivity in his hand and fingers. What tactics should the doctor choose?

- a. Prescribe analgesics and diuretics
- b. Repeat the repositioning
- c. Remove the splint

**d. Cut the bandage that secures the splint**

- e. Expectant management, because this is a natural phenomenon - the edema will decrease on its own in 24 hours

834. For the past 6 years a 37-year-old woman has been experiencing frequent nosebleeds, severe metrorrhagias, and periodic bruising on her skin. 10 days ago, after a severe nosebleed, her weakness intensified, she developed dizziness and palpitations. Objectively, her skin is pale, there are multiple petechiae and isolated ecchymoses on the anterior surface of her torso, legs, and arms. In the blood: Hb - 80 g/L, erythrocytes -  $4.0 \cdot 10^{12}/L$ , color index - 0.7; leukocytes -  $5.3 \cdot 10^9/L$ ; band neutrophils - 2%, segmented neutrophils - 65%, eosinophils - 2%, lymphocytes - 24%, monocytes - 5%, platelets -  $10 \cdot 10^9/L$ , ESR - 15 mm/hour. Make the diagnosis:

- a. Iron deficiency anemia
- b. Aplastic anemia

**c. Idiopathic thrombocytopenic purpura**

- d. Hemophilia
- e. Hemorrhagic vasculitis

835. A 37-year-old woman complains of enlarged cervical and mediastinal lymph nodes. Blood test detects the ESR of 35 mm/hour. Lymph node biopsy detects a granuloma that consists of epithelial giant cells without caseous necrosis. What is the most likely diagnosis in this case?

- a. Lymphogranulomatosis
- b. Erythroleukemia
- c. Infectious mononucleosis



**d. Sarcoidosis**

**e. Lymph nodes tuberculosis**

836. A woman came to the gynecologist to plan her pregnancy. She was advised to increase her intake of the products rich in folic acid, particularly soy beans, bread made of coarsely ground flour, fruits, leafy green vegetables. Such changes in her diet will work toward the prevention of:

- a. Rickets
- b. Iron-deficiency anemia in the pregnant woman
- c. Non-closure of the fontanel
- d. Polyhydramnios

**e. Non-closure of the neural tube in the fetus**

837. A 45-year-old man was delivered to a hospital with complaints of vomiting with streaks of blood, loss of weight. On esophagofiberscopy a cauliflower-shaped mucosal growth was detected in the abdominal esophagus. The mucosa there bleeds on contact. What preliminary diagnosis can be made?

**a. Barrett esophagus**

**b. Esophageal tumor**

- c. Esophageal achalasia
- d. Abdominal esophagitis
- e. Esophageal diverticulum

838. A 73-year-old patient has been suffering from chronic atrophic gastritis for over 10 years. Objectively, her skin and mucosa are pale and subicteric, the tongue is bright red, with marked atrophy. The patient is hemodynamically stable. Sensitivity is symmetrically reduced in the patient's legs. Complete blood count: erythrocytes -  $1.5 \cdot 10^{12}/L$ , hemoglobin - 60 g/L, color index - 1.2, platelets -  $120 \cdot 10^9/L$ , leukocytes -  $3.0 \cdot 10^9/L$ , megalocytes, hypersegmentation of neutrophil nuclei. What complication of chronic atrophic gastritis has occurred in the patient?

- a. Stomach cancer
- b. Acute hemorrhage
- c. Iron deficiency anemia

**d. B<sub>12</sub> deficiency anemia**

**e. Peptic ulcer**

839. A 47-year-old woman complains of paroxysmal headaches that have been occurring for the past 5 years. The pain is unilateral, intense, and localized in the frontal area. It is accompanied by nausea and abdominal discomfort and begins suddenly. The headaches are preceded by blurred vision. The woman has a history of hypertension episodes, but currently takes no medicines. Between the headaches, her condition is satisfactory. Objectively: she is overeating (body mass index is 29), her blood pressure is 170/95 mm Hg. Her neurological status is normal. Make the diagnosis:

- a. Benign intracranial hypertension
- b. Hypertensive encephalopathy

**c. Migraine**

**d. Epilepsy**

**e. Chronic subdural hematoma**

840. A 76-year-old man complains of epigastric pain and periodical vomiting throughout the past 2 months. He has no dysphagia or <<coffee grounds>> vomiting. During this period, he has lost 5 kg, his appetite is low. He does not smoke and is not a heavy drinker. Previously, due to gastric dyspepsia he was taking antacids and proton pump inhibitors, but recently these drugs have stopped bringing him relief. Objectively, he is undereating, a lymph node can be palpated in his left supraclavicular fossa. The liver is not enlarged. Make the diagnosis:

- a. Gastric ulcer
- b. Diaphragmatic hernia
- c. Pylorostenosis
- d. Esophageal tumor

**e. Gastric carcinoma**

841. What food product can cause diphyllobotriasis, if insufficiently processed?

**a. Poultry**

**b. Fish**

- c. Pork
- d. Mutton
- e. Beef

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

- a. Levomepromazine, clozapine, quetiapine
- b. Doxepin, amitriptyline, mianserin
- c. Gabapentin, pregabalin, ethosuximide

**d. Diazepam, lorazepam, midazolam**

- e. Topiramate, oxcarbazepine, carbamazepine

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

- a. Lymphogranulomatosis
- b. Scarlet fever
- c. Viral hepatitis A

**d. Infectious mononucleosis**

- e. Diphtheria

844. A 31-year-old woman has been suffering from systemic scleroderma for 14 years. She underwent multiple inpatient treatment courses. She complains of intermittent dull pain in the area of her heart, palpitations, shortness of breath, headache, swollen eyelids, weight loss, and painful and deformed joints in her limbs. The prognosis of her condition will be worse if which of the following organs is affected?

- a. Heart
- b. Gastrointestinal tract
- c. Skin and joints
- d. Lungs

**e. Kidneys**

845. A medical committee consisting of a therapist, dermatologist, traumatologist, ophthalmologist, neurologist, immunologist, surgeon, otolaryngologist, and hematologist was called in for the regular medical examination of the workers at a chemical factory that produces chromium- and nickel-containing mineral compounds. Name the minimum composition of such a committee, taking into account the characteristics of the products manufactured by the factory:

- a. Therapist, dermatologist, traumatologist
- b. Therapist, ophthalmologist, neurologist
- c. Therapist, hematologist, ophthalmologist
- d. Therapist, immunologist, surgeon

**e. Otolaryngologist, therapist, dermatologist**

846. 2 hours after eating unknown mushrooms, a 28-year-old man sensed a decrease in his mobility and deterioration of his ability to focus. This condition was then followed by a state of agitation and aggression. On examination he is disoriented and his speech is illegible. 4 hours later he developed fetor hepaticus and lost his consciousness. What syndrome can be observed in this patient?

- a. Hepatolienal syndrome
- b. Cytolytic syndrome
- c. Portal hypertension
- d. Cholestatic syndrome

**e. Acute hepatic failure**

847. A 55-year-old man on the 3rd day after an acute anterior myocardial infarction complains of shortness of breath and a dull pain behind the sternum that decreases when he leans forward. Objectively, his blood pressure is 140/80 mm Hg and his heart sounds are muffled. ECG shows atrial

fibrillation with the ventricular rate of 110/min., pathological Q wave, and ST segment elevation in the right-sided chest leads. Make the diagnosis:

- a. Dressler syndrome
- b. Acute pericarditis**
- c. Pulmonary embolism
- d. Tietze syndrome
- e. Dissecting aortic aneurysm

848. A 30-year-old woman complains of general weakness, difficult swallowing when eating, dry skin and brittle hair. Objectively, her body temperature is  $36.6^{\circ}\text{C}$ , respirations - 16/min., Ps- 92/min., blood pressure - 110/70 mm Hg. The skin and visible mucosae are pale. In the blood: Hb- 65 g/L, erythrocytes -  $3.2 \cdot 10^{12}/\text{L}$ , color index - 0.6, reticulocytes - 3%, leucocytes -  $6.7 \cdot 10^9/\text{L}$ , eosinophils - 2%, stab neutrophils - 3%, segmented neutrophils - 64%, lymphocytes - 26%, monocytes - 5%, ESR - 17 mm/hour. Serum iron - 7.4  $\mu\text{mol}/\text{L}$ , total protein - 78 g/L. What factor is deficient, causing this condition?

- a. Folic acid
- b. Iron**
- c. Vitamin B<sub>6</sub>
- d. Protein
- e. Glucose 6-phosphate dehydrogenase

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

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

850. During an outdoors school event in hot weather, a 10-year-old girl lost her consciousness. Body temperature -  $36.7^{\circ}\text{C}$  Objectively her skin is pale and cold to touch, her pupils are dilated. Blood pressure - 90/50 mm Hg. Heart rate - 58/min. What pathology occurred in this case?

- a. Paralytic collapse
- b. Sunstroke
- c. -
- d. Sympathicotonic collapse

**e. Syncope**

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

- a. Post-traumatic meningoencephalitis
- b. Cerebral contusion, basilar skull fracture**
- c. Meningoencephalitis
- d. Cerebral contusion, subarachnoid hemorrhage
- e. Concussion

852. A 27-year-old woman complains of foul-smelling discharge from her genital tracts, pain in her lower abdomen, and elevated temperature. The complaints arose 2 days ago. She has a history of surgical abortion at the term of 8 weeks one week ago. Mirror examination: the uterine cervix is clear, external orifice produces foul-smelling discharge. Vaginal examination: the uterus lies in ante flexion, is mobile, painful, and slightly enlarged. The appendages are without changes. Make the provisional diagnosis:

- a. Postabortal endometritis**
- b. Appendicitis
- c. Enterocolitis
- d. Salpingoophoritis
- e. Acute respiratory disease

853. A 12-year-old girl complains of weakness, dizziness, headache, and a fever of  $38^{\circ}\text{C}$ . Objectively, her body temperature is  $37.8^{\circ}\text{C}$ , her mucosa and skin are pale, her pharynx is without changes. Palpation detects submandibular and cervical lymph nodes that are enlarged to 2 cm, dense and painless. No pathological changes of internal organs were detected. Complete blood count: erythrocytes -  $2.8 \cdot 10^{12}/\text{L}$ , hemoglobin - 85 g/L, color index - 0.9, leukocytes -  $10 \cdot 10^9/\text{L}$ , eosinophils - 0%, band neutrophils - 1%, segmented neutrophils - 8%, lymphocytes - 47%, reticulocytes - 0.5%, platelets -  $60 \cdot 10^9/\text{L}$ , blast cells - 44%. What is the most likely diagnosis in this case?

- a. Acute erythromyelosis
- b. Infectious mononucleosis
- c. Lymphogranulomatosis

**d. Acute leukemia**

- e. Chronic lymphocytic leukemia

854. You witnessed a car accident. When examining the place of the accident you noticed a man of about 30 years, who was hit by the car. He is unconscious. On his neck on the left there is a profuse hemorrhage with bright-red blood. How to stop this hemorrhage?

- a. Put him in a stable position
- b. Digital occlusion, Mikulich method**
- c. Maximal hyperextension of the neck
- d. Apply a neck brace
- e. Apply a plaster cast

855. A 2-month-old baby was born with body weight of 5100 g. The baby has jaundice, hoarse cry, umbilical hernia, and a delay in physical development. The liver is +2 cm, the spleen is not enlarged. The umbilical cord separation was delayed in the baby. In the blood: Hb - 120 g/L, erythrocytes -  $4.5 \cdot 10^{12}/\text{L}$ , ESR - 3 mm/hour. Total serum bilirubin - 28  $\mu\text{mol/L}$ , indirect bilirubin - 20  $\mu\text{mol/L}$ , direct bilirubin - 8  $\mu\text{mol/L}$ . What disease can be suspected first?

- a. Congenital hepatitis
- b. Cytomegalovirus infection
- c. Hemolytic anemia

**d. Congenital hypothyroidism**

- e. Conjugated jaundice

856. In a pre-school educational establishment the menu consists of the following dishes: milk porridge from buckwheat, pasta with minced meat, cucumber salad, kissel (thin berry jelly), rye bread. What dish should be excluded from the menu?

- a. Cucumber salad
- b. Pasta with minced meat**
- c. Rye bread
- d. Milk porridge from buckwheat
- e. Kissel (thin berry jelly)

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

- a. A
- b. C**
- c. B<sub>1</sub>
- d. PP
- e. B<sub>2</sub>

858. A man, who one day ago returned from a trip to Africa, presents with a sharply painful cluster of lymph nodes in his armpit. The skin over the lymph node cluster is hyperemic. Bubonic plague is suspected. What must the contact persons use for urgent prevention of this disease?

- a. Fluconazole
- b. Homologous immunoglobulin
- c. Heterologous serum
- d. Praziquantel
- e. Doxycycline**

859. A multigravida, labor II, 36-37 weeks of gestation, has gone into labor. Her waters broke 8 hours ago, the labor activity continues for the last 4 hours, it is regular, with contractions that last 35 seconds and occur every 3-4 minutes. The child is in the cephalic presentation, with the head pressed to the entrance into the lesser pelvis. The parturient woman complains of a sudden sharp abdominal pain. Her pulse is 100/min., blood pressure is 110/70 - 100/70 mm Hg. The uterus is tense and does not relax between the contractions. Fetal heartbeat is muffled - 100/min. The amniotic fluid is blood-colored and continues to leak. What is the most likely diagnosis?

- a. Uterine rupture
- b. Partial placenta previa
- c. Premature detachment of the normally positioned placenta**
- d. Cervical rupture
- e. Rupture of the umbilical vessels

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

- a. Histamine H<sub>1</sub> blockers
- b. Selective muscarinic antagonists
- c. Proton pump inhibitors**
- d. Bismuth preparations
- e. Histamine H<sub>2</sub> blockers

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

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

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

- a. Lens subluxation
- b. Hemianopsia with a neurological pathology
- c. Initial signs of glaucoma
- d. Vascular pathology of the retina
- e. Retinal detachment**

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

- a. Body mass
- b. Body mass index**

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

864. In 10 hours after eating canned mushrooms a 27-year-old patient has developed diplopia, bilateral ptosis, disrupted swallowing, shallow breathing with respiratory rate 40/min., muscle weakness, enteroparesis. What measure should be taken first?

- a. Introduction of glucocorticosteroids
- b. Intravenous detoxication therapy

**c. Intubation of the trachea for artificial respiration**

d. Introduction of antituberculous serum

e. Gastrointestinal lavage

865. A 21-year-old woman came to a surgeon 5 hours after she had scalded her left forearm with boiling water. Objectively, a skin patch 17x10 cm in size had flaccid vesicles; epidermis there was torn and displaced in some areas. The wound bottom was whitish-gray, dry, and its pain sensitivity was reduced. After a treatment with bandages soaked with a solution of furacilin (nitrofuril), levosin, and hiposol, on the 29th day after the burn, the necrotic scab came off, leaving a pink superficial scar in its place. What was the degree of the burn in this case?

a. IIIB degree burns

**b. IIIA degree burns**

c. II degree burns

d. I degree burns

e. IV degree burns

866. For 2 weeks a 37-year-old HIV-positive man has been presenting with progressing dyspnea and body temperature up to 37.7 °C. He was diagnosed with pneumocystic pneumonia. What etiologic drug is indicated in this case?

a. Fluconazole

b. Acyclovir

c. Metronidazole

**d. Co-trimoxazole**

e. Ceftriaxone

867. The 5-year-old child has been ill for 2 weeks. Cough attacks developed first and were then followed by reprises. During coughing the child's face turns red and cervical veins bulge. The cough attacks induce vomiting. X-ray shows intensified bronchial pattern. Blood test: leukocytes -  $16 \cdot 10^9/L$ , lymphocytes - 72%, erythrocyte sedimentation rate - 4 mm/hour. What is the most likely diagnosis?

a. Pneumonia

b. Adenovirus infection

**c. Pertussis**

d. Foreign body

e. Obstructive bronchitis

868. A 65-year-old patient complains of shortness of breath, cough with foaming pink sputum, lack of air, and fear of death. Objectively, orthopnea, pale skin, acrocyanosis, and cold sticky sweat are observed in the patient. Auscultation detects coarse breathing with wet fine and medium vesicular crackles in the inferioposterior segments on both sides. Respiratory rate - 40/min. The heart sounds are sharply muffled. At the top of the heart, a gallop rhythm is observed. What is the most likely diagnosis in this case?

**a. Pulmonary edema**

b. Focal pneumonia

c. Pulmonary thromboembolism

d. Bronchial asthma

e. Infarction pneumonia

869. A premature baby born at 34 weeks of gestation presents with the following at 4 hours after birth: tachypnea, respiration with a seesaw motion, sternum depression, expiratory murmurs. Respiratory rate - 80/min. Auscultation detects weakened breathing with non-constant heterogeneous crackles over the lungs. X-ray of the lungs shows air bronchogram and a nodose-reticular lung pattern. What is the most likely diagnosis in this case?

a. Birth injury

b. Pulmonary atelectasis

c. Massive meconium aspiration syndrome

**d. Hyaline membrane disease**

e. Neonatal pneumonia

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

a. Ultraviolet disinfection of water



b. Chlorination with pre-ammonization

c. Hyperchlorination

d. Ozonization

e. Double chlorination

871. A 35-year-old person came to a hospital with complaints of pain attacks in the right lumbar region and frequent urination. General urinalysis detects protein levels of 0.066 g/L and 6-8 fresh erythrocytes in sight. Ultrasound shows moderate urosthesis on the right. What study must the patient undergo to establish the diagnosis?

a. Computed tomography

b. Pneumoretroperitoneography

c. Excretory urography

d. Chromocystoscopy

e. Retrograde ureteropyelography

872. In the computer lab of the research sector at a polytechnic institute, the workstations of laboratory technicians are located close in front of the screens. Throughout their whole working day, the technicians are exposed to the electromagnetic waves of ultra high frequencies. Exposure to intense electromagnetic waves of such frequency is especially dangerous for the:

a. Tactile sensitivity

b. Sensory sensitivity

c. Pain sensitivity

d. Visual analyzer

e. Hearing analyzer

873. A patient has gradually lost his 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  $\mu\text{mol/L}$ , blood osmolality - 350 mOsmol/kg  $H_2O$ . No urinary excretion. Make the diagnosis:

a. Acute renal failure

b. Acute disturbance of cerebral circulation

c. Hyperosmolar coma

d. Hyperglycemic coma

e. Uremic coma

874. A 38-year-old woman came to her family doctor with complaints of headache, irritability, insomnia, weight loss, and increased sweating. Objectively, her skin is warm and moist, she has hand tremors, the patient is asthenic, blood pressure - 120/80, heart rate - 90/min., body temperature -  $36.6^{\circ}\text{C}$ , respiration is free and vesicular, heart sounds are rhythmic and clear. Ultrasound reveals thyroid gland enlargement. The doctor referred the woman to undergo a blood test for T3, T4, and TSH levels. What are the most likely results of the test?

a. Reduced levels of T3, T4, and TSH

b. Reduced levels of T3, increased levels of T4 and TSH

c. Increased levels of T3 and T4, reduced levels of TSH

d. Reduced levels of T3 and T4, increased levels of TSH

e. Increased levels of T3, T4, and TSH

875. A 35-year-old man suffers from insulin-dependent diabetes mellitus and chronic cholecystitis. He takes NPH insulin: 20 units in the morning and 12 units in the evening. After a meal he developed pain in the right subcostal area, nausea, vomiting, sleepiness, and increased polyuria. What prehospital measures will be the most effective for prevention of crisis within the next several hours?

a. Change insulin regimen

b. Decrease carbohydrates in the diet

c. Take cholagogues

d. Take analgesics

e. Exclude fats from the diet

876. A 33-year-old man developed multiple rashes on the skin of his torso and extensor surfaces of his upper and lower limbs. The rashes itch and occasionally fuse together and form plaques. The elements of rash are covered with silver-white fine scales that easily flake off when scratched.

Grattage test results in three sequential phenomena: stearin spot, terminal film, and punctate hemorrhage. What diagnosis can be suspected?

- a. Lichen ruber planus
- b. Pyoderma
- c. Parapsoriasis
- d. Secondary papular syphilid

**e. Psoriasis**

877. After eating shrimps, a 25-year-old man suddenly developed skin itching, some areas of his skin became hyperemic or erupted into vesicles. Make the diagnosis:

- a. Acute urticaria**
- b. Hemorrhagic vasculitis (Henoch-Schonlein purpura)
- c. Urticaria pigmentosa
- d. Scabies
- e. Psoriasis

878. A 35-year-old woman developed red swollen areas on the dorsal surface of her hands after a severe nervous strain, which was followed by formation of small inflamed nodules, vesicles, and later erosions with significant discharge of a serous fluid. This process is accompanied by severe itching. Make the diagnosis:

- a. Toxicoderma
- b. True eczema**
- c. Allergic dermatitis
- d. Microbial eczema
- e. Simple contact dermatitis

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

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

880. While at work, a 57-year-old man developed nausea, vomiting, a brief episode of unconsciousness, and intense headache with the predominant localization in the back of his head. Objectively, he has nuchal rigidity, positive Kernig sign on both sides, general hyperesthesia, and divergent strabismus caused by the left eyeball. His cerebrospinal fluid is hemorrhagic, with the pressure of 300 mm H<sub>2</sub>O. What is the most likely mechanism of this disease?

- a. Intraventricular hemorrhage
- b. Parenchymal hemorrhage
- c. Cerebral vasospasm
- d. Thrombosis of cerebral vessels

**e. Subarachnoid hemorrhage**

881. An 18-year-old woman complains of pains in her lower abdomen, purulent discharge from the vagina, temperature rise up to 37.8°C) Anamnesis states that she had random sexual contact the day before the signs appeared. She was diagnosed with acute bilateral adnexitis. On additional examination: leukocytes in the all field of vision, bacteria, diplococci with intracellular and extracellular position. What agent is most likely in the given case?

- a. Staphylococcus
- b. Trichomonad
- c. Chlamydia
- d. Colibacillus

**e. Gonococcus**

882. A 48-year-old patient complains of frequent constricting retrosternal pain that radiates into the left shoulder and left scapula. Pain attacks occur at night, at complete rest, and last 10-15 minutes. During the visit to a polyclinic, no ECG abnormalities and no changes in the patient's general

condition were detected. What examination would be most important for clarification of the diagnosis?

- a. Catheterization of cardiac chambers
- b. Holter ECG monitoring**
- c. Bicycle ergometry
- d. Echocardiography
- e. Repeat ECG in a week

883. A man was brought into the admission room after an overexposure to cold. He complains of sharp pain in the small of his back and elevated body temperature up to  $38^{\circ}\text{C}$ . He took some aspirin. Blood test: leukocytes -  $10.5 \cdot 10^{12}/\text{L}$ , eosinophils - 5%, band neutrophils - 8%, segmented neutrophils - 51%, lymphocytes - 32%, monocytes - 4%, erythrocyte sedimentation rate - 28 mm/hour. Urinalysis: protein - 0.6 g/L, leukocytes - cover the whole vision field, large amount of mucus. What is the most likely diagnosis?

- a. Acute pyelonephritis**
- b. Subacute malignant glomerulonephritis
- c. Acute glomerulonephritis
- d. Tubulointerstitial nephritis
- e. Chronic pyelonephritis

884. Clinical trials have proved the "Lipoflavon" drug to be effective for treatment of unstable angina pectoris in the control group and experimental group of patients. Neither patients nor researchers knew who belonged to which group. Name this type of study:

- a. Total-blind study
- b. Simple blind study
- c. Triple-blind study
- d. Double blind study**
- e. Multicenter study

885. A 40-year-old woman, gravida 6, para 3, at the 40 weeks of her pathological pregnancy (threatened miscarriage, type I gestosis of the second half of her pregnancy), gave birth to a boy with asphyxia. The baby's condition is severe, the weight is 2 kg, there are signs of immaturity and hydrocephalus. The baby's skin is pale, icteric, and has acrocyanosis. The heart sounds are muffled, there is a harsh systolic murmur at all points of auscultation. The abdomen is enlarged, the liver is +3 cm. The urine is saturated, the stool is light-colored. An ophthalmologist has detected chorioretinitis in the baby. Make the diagnosis:

- a. Congenital heart defect
- b. Congenital toxoplasmosis**
- c. Hemolytic disease of the newborn
- d. Sepsis
- e. Congenital hepatitis

886. A 35-year-old patient undergoing treatment for heart disorder in cardiological department has developed complaints of acute sudden pain in the epigastrium, temperature rise up to  $38,3^{\circ}\text{C}$ . Blumberg's and Razdolsky's (abduction of femur) signs are positive. What necessitates surgical aid in the given case?

- a. Severity of the concomitant pathology
- b. Progress as a surgical disease**
- c. Activity of the heart disorder
- d. Urgent aid is required to save the patient's life
- e. Extent of congenital and acquired development disorders

887. A 43-year-old patient was hospitalized 40 minutes after the onset of acute pain in the epigastrium. The pain later moved into the right iliac region. Objectively, the following is observed: sharp tension of the muscles of the anterior abdominal wall, positive signs of Blumberg, Mussy-Georgievsky, Chugaev, and Bernstein. Hepatic dullness is absent. What is the most likely diagnosis in this case?

- a. Acute pancreatitis
- b. Acute appendicitis
- c. Acute cholecystitis

d. Perforated stomach ulcer

e. Renal colic

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

a. Cushing disease

b. Alimentary obesity

c. Cushing syndrome

d. Diabetes mellitus

e. Essential hypertension

889. A 3-year-old child, while playing, suddenly developed cough attacks and problems with breathing. Objectively, the child has a dry cough and mixed type dyspnea. Auscultation detects a small amount of dry crackles in the lungs. Respiration is weakened on the right. The child does not attend kindergarden and has all necessary immunizations for that age. What pathology can be suspected?

a. Airway foreign body

b. Bronchial asthma

c. Pertussis

d. Acute respiratory viral infection

e. Pneumonia

890. An 8-year-old girl was diagnosed with signs of Morgagni-Adams-Stokes disease that developed against the background of the III degree atrioventricular heart block. What drug should be introduced intravenously for emergency aid?

a. Potassium chloride

b. Atropine

c. Prednisolone

d. Digoxin

e. Dobutamine

891. Examination of a milk sample detected the following: color - whitish, odor - normal, taste - characteristic of milk, density - 1.038, acidity - 35°Th (Thorner degrees), fat content - 3.2%. Determine the milk quality.

a. The milk is of good quality

b. The milk is falsified

c. The milk is of poor quality

d. The milk is of reduced quality

e. The milk can be used only under certain conditions

892. A 25-year-old man developed hematuria after an overexposure to cold. Objectively, his blood pressure is 160/110 mm Hg. Urinalysis reveals the following: proteinuria - 3.5 g/L, erythrocytes cover the entire vision field, there are 5-6 hyaline cylinders (casts) in sight. What diagnostic method would be most informative in this case?

a. Cystoscopy

b. Kidney biopsy

c. Tomography

d. Excretory urography

e. Kidney ultrasound

893. A 33-year-old patient has developed dyspnea during physical exertion, palpitations, disruptions of heart rate, swollen legs. In the childhood the patient had a case of acute rheumatic fever that required in-patient treatment. There were no further requests for medical care. Objectively: heart rate is 92/min., rhythmic; BP is 110/70 mm Hg. At the apex the I heart sound is increased, triple rhythm, diastolic murmur. What heart disease is most likely?

a. Mitral valve failure

b. Mitral valve stenosis

- c. Tricuspid valve stenosis
- d. Aortic valve failure
- e. Aortic outflow stenosis

894. An 89-year-old patient complains of dry hacking cough that occurs mainly in the morning. He has history of ischemic heart disease, stable angina pectoris, functional class II, and essential hypertension, stage 2, degree 2. The patient constantly takes lisinopril, bisoprolol, aspirin, and rosuvastatin. What drug has caused the cough in the patient?

- a. Bisoprolol
- b. -

**c. Lisinopril**

- d. Acetylsalicylic acid
- e. Rosuvastatin

895. A 65-year-old man complains of cough attacks that occur when he eats liquid foods. Three months ago he was diagnosed with a carcinoma in the upper third of the esophagus. He underwent radiation therapy. What complication developed in this man?

**a. Tracheoesophageal fistula**

- b. Lung abscess rupture into the pleural cavity
- c. Tracheal stenosis
- d. Spontaneous pneumothorax
- e. Perforation of a gastric cardia ulcer

896. A child is 4 months old. The disease onset was acute and manifested as a temperature of  $37.8^{\circ}\text{C}$  and a slight cough. On the third day after the onset, the cough intensified and became accompanied by dyspnea. Percussion detects a tympanic sound over the lungs, while auscultation reveals numerous wet fine bubbling and sibilant wheezes during the exhalation. Make the provisional diagnosis:

**a. Acute bronchiolitis**

- b. Focal pneumonia
- c. Acute bronchitis
- d. Bronchopneumonia
- e. Obstructive bronchitis

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

- a. Mitral insufficiency
- b. Aortic stenosis
- c. Aortic insufficiency

**d. Mitral stenosis**

- e. Pulmonary artery stenosis

898. An 18-year-old girl was brought into the gynecology department with complaints of elevated body temperature up to  $37.8^{\circ}\text{C}$ , sharp pain in her lower abdomen, more intense on the right, and difficult defecation. Vaginal examination detected a painful dense elastic formation 5x6 cm in the area of her right ovary. Pregnancy test is negative. What is the most likely diagnosis?

- a. Ovarian apoplexy
- b. Appendicitis
- c. Ovarian cyst rupture

**d. Torsion of ovarian tumor pedicle**

- e. Ectopic pregnancy

899. A 38-year-old man complains of a spasmodic abdominal pain, frequent liquid stool with mucus and fresh blood admixtures. He has been suffering from this condition for 2 years, during which he has lost 12 kg. Objectively: Ps - 92/min., blood pressure - 100/70 mm Hg, body temperature -  $37.4^{\circ}\text{C}$ ) The abdomen is soft and painful along the large intestine. The sigmoid colon is spastic. In

the blood: erythrocytes -  $3.2 \cdot 10^{12}/L$ , Hb - 92 g/L, leukocytes -  $10.6 \cdot 10^9/L$ , ESR - 32 mm/hour. Irrigoscopy shows narrowing of the large intestine, no haustra, blurred margins, "lead-pipe" sign. What is the most likely diagnosis?

- a. Gastric carcinoma
- b. Amoebic dysentery
- c. Ulcerative colitis**
- d. Crohn's disease
- e. Diverticular disease of the intestine

900. A 37-year-old woman complains of shortness of breath and constricting retrosternal pain. One week ago she had a flu. Objectively, she has acrocyanosis, her heart rate is 98/min., blood pressure - 90/75 mm Hg, respiratory rate - 26/min. The cardiac borders are expanded to the left and right by 3 cm. The heart sounds are muffled, above the cardiac apex there are a protodiastolic gallop rhythm and a systolic murmur. Hb - 100 g/L, ESR - 25 mm/hour. Make the diagnosis:

- a. Dilated cardiomyopathy
- b. Ischemic heart disease, angina pectoris
- c. Exudative pericarditis
- d. Myocardial dystrophy

**e. Infectious-allergic myocarditis**

901. For a week a 42-year-old patient has been suffering from fever attacks which occur every 48 hours. Body temperature raises up to  $40^{\circ}C$  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. Enzyme-linked immunosorbent assay
- b. Bacteriological analysis
- c. Microscopy of hanging blood drop
- d. Microscopy of blood smear and thick blood film**
- e. Complete blood count

902. During physical exercises, a 32-year-old patient suddenly felt lack of air, weakness, chest pain on the right that radiated into the right shoulder, shortness of breath, and palpitations. Objectively, the patient's condition is severe, tachycardia is up to 100/min., blood pressure - 90/60 mm Hg, respiratory rate - 28/min., the right half of the chest lags behind during breathing. Percussion detects tympanic sound on the right, no respiratory sounds were detected there. The body temperature is normal. What is the most likely diagnosis in this case?

- a. Vascular collapse
- b. Myocardial infarction
- c. Pulmonary infarction
- d. Spontaneous pneumothorax**

**e. Pneumonia**

903. Anthropometric measurements are widely used to study the physical development of children and teenagers. What measurement is the functional one?

- a. Weight measurement
- b. Measuring the vital capacity of the lungs**
- c. Determining the shape of the chest
- d. Height measurement
- e. Determining the shape of the backbone

904. A 20-year-old patient complains of eye redness, lacrimation, moderate purulent discharge from the conjunctival sac, and the sensation of a foreign body in the eyes. Objectively, hyperemia of the conjunctiva of the eyelids is observed. Conjunctival injection was detected on the eyeballs. The cornea is transparent. The pupils are 3 mm in diameter, their light response is lively. The lens and vitreous body are transparent. The fundus is normal. What is the most likely diagnosis in this case?

- a. Gonoblenorrhea
- b. Acute bacterial conjunctivitis**
- c. Acute iridocyclitis
- d. Allergic conjunctivitis



e. Adenoviral keratoconjunctivitis

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

a. Polycythemia vera

b. Cushing disease

c. Obliterating endarteritis

d. Essential hypertension

e. Secondary erythrocytosis

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

a. Homemade salted fish

b. Salads

c. Pork stew

d. Fried potatoes

e. Cheese

907. A 56-year-old patient complains of pain in the epigastrium after eating, eructation, loss of appetite, slight loss of weight, fatigability. The patient smokes; no excessive alcohol consumption. Objectively: pale mucosa, BP- 110/70 mm Hg. The tongue is "lacquered". The abdomen is soft, sensitive in the epigastric area. Blood test: erythrocytes -  $3,0 T/l$ , Hb- 110 g/l, color index - 1,1; macrocytosis; leukocytes -  $5,5 g/l$ , ESR- 13 mm/hour. On fibrogastroduodenoscopy: atrophy of fundic mucosa. What pathogenesis does this disorder have?

a. Alimentary factor

b. *emphH.pylori* persistence

c. Gastropathic effect

d. Producing antibodies to parietal cells

e. Chemical factor

908. A 74-year-old woman complains of painful and distended abdomen and nausea. She suffers from postinfarction and atherosclerotic cardiosclerosis and ischemic heart disease. Objectively, she is in a severe condition, her abdomen is distended, the abdominal wall is barely involved in the act of breathing. Laparoscopy detects a small amount of turbid exudate in the abdominal cavity, one of the small intestine loops is dark blue. Make the diagnosis:

a. Volvulus

b. Mesenteric thrombosis

c. Acute intestinal obstruction

d. Ischemic abdominal syndrome

e. Erysipelas

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

a. Lymphadenitis

b. Lymphangitis

c. Thrombophlebitis

d. Deep vein thrombosis

e. Furuncle

910. A premature newborn from the first pregnancy was born at 37 weeks of gestation, with the weight of 2400 g and the length of 51 cm. The infant is anxious, has limb tremor, does not suckle,

exhibits respiratory disturbances and hepatosplenomegaly. At the end of the first day of life the child developed icteric skin and mucosa. On the second day, skin rashes appeared: both separate vesicles and clusters of vesicles located over the ribcage. Make the provisional diagnosis:

- a. Toxoplasmosis
- b. Vesiculopustulosis
- c. Rubella
- d. Neonatal pemphigus
- e. Congenital herpes infection**

911. A 45-year-old patient suddenly fell ill with the onset of the disease manifesting as chills and a fever of  $39.2^{\circ}\text{C}$ . In the evening, intense pain developed in the stomach and calf muscles. Two days later, the patient noticed that the skin and sclera are icteric. Objectively, the following is observed: severe condition, a fever of  $39.9^{\circ}\text{C}$ , marked inertness, moderately icteric skin and sclera, multiple petechiae on the trunk, vesicular breathing, respiratory rate - 20/min., heart rate - 102/min., blood pressure - 100/60 mm Hg. The abdomen is soft, painful in the epigastrium. The liver protrudes 3 cm from under the costal arch. The 24-hour diuresis consists of 300 mL of dark urine. What is the provisional diagnosis in this case?

- a. Sepsis
- b. Viral hepatitis B
- c. Infectious mononucleosis
- d. Yersiniosis

**e. Leptospirosis**

912. 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 the previous delay of 2 months. Objectively, her 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. Dysmenorrhea
- b. Migraine

**c. Posthemorrhagic anemia**

- d. Gastritis
- e. Somatoform autonomic dysfunction of hypotonic type

913. A newborn boy has been hospitalized with complaints of projectile vomiting with curdled milk and weight loss. The vomiting began on day 21 of life, the amount of stools and urine output decreased. What diagnostic method would be most informative in this case?

- a. Abdominal CT scan
- b. Abdominal X-ray
- c. Abdominal ultrasound
- d. Fibrogastroduodenoscopy**

**e. Abdominal laparoscopy**

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

- a. Displaced fracture of the left clavicle**
- b. Non-displaced subperiosteal fracture of the left clavicle
- c. Erb's palsy
- d. Osteomyelitis of the left clavicle
- e. Phlegmon of the newborn

915. A 52-year-old man had an acute onset of the disease after an overexposure to cold that occurred 3 weeks ago. He complains of cough, high body temperature of  $39.5^{\circ}\text{C}$ , chest pain on the right, and marked dyspnea. His pulse is 120/min., blood pressure - 90/60 mm Hg, respiration rate - 48/min. Acrocyanosis is observed. Objectively, the right side of his chest lags behind during breathing. Percussion detects a pulmonary dullness on the right. Auscultation detects no breathing over the right lung. X-ray shows on the right a shadow with fuzzy upper margin to the level of rib II. Exudate contains 90% of neutrophils. What is the most likely diagnosis in this case?

- a. Exudative tuberculous pleurisy**

- b. Croupous pneumonia
- c. Lung cancer
- d. Infiltrative tuberculosis of the right lung

**e. Pleural empyema**

916. A 62-year-old woman was brought into the admission room with complaints of severe burning retrosternal pain and asphyxia. She has a 10-year-long history of essential hypertension. Objectively her condition is moderately severe. She presents with skin pallor, cyanotic lips, and vesicular respiration over her lungs. The II heart sound is accentuated over the aorta. Blood pressure - 210/120 mm Hg, heart rate (pulse) - 76/min. ECG shows elevation of ST segment in the leads I, AVL, and V5-V6. What is the most likely diagnosis?

**a. Hypertensive crisis complicated with acute myocardial infarction**

- b. Hypertensive crisis complicated with acute left ventricular failure
- c. Pulmonary embolism
- d. Hypertensive crisis complicated with instable angina pectoris
- e. Uncomplicated hypertensive crisis

917. A 56-year-old woman complains of itching skin of her torso, constant nausea, constipation, sensation of heaviness and pain in the right subcostal area, extreme general fatigue. The patient suffers from biliary cirrhosis. The skin is pale icteric. The abdomen is soft, the liver protrudes 2,0 cm from under the margin of the right costal arch, sensitive on palpation. Biochemical investigation: total bilirubin - 142,0  $\mu\text{mol/l}$ , conjugated bilirubin - 139,0  $\mu\text{mol/l}$ , alanine aminotransferase - 0,98 mmol/hour·l, aspartate aminotransferase - 0,82 mmol/hour·l, alkaline phosphatase - 8,7 mmol/hour·l. What drug should be prescribed in the first place?

**a. Ursodeoxycholic acid**

- b. Livolin forte
- c. Allochol
- d. Sirepar
- e. Essentiale forte (Phospholipides)

918. A 72-year-old patient has been hospitalized with complaints of pain in the left hip joint. The patient received an injury on the street as a result of falling on the left side. During examination, the patient lies on the back, the left leg is rotated outwards, mildly adducted, and shortened. The left trochanter is palpable above the Roser-Nelaton line, the Shemaker line passes above the navel. Positive "stuck heel" sign (inability to perform a lying straight leg raise) is observed on the left. What is the provisional diagnosis in this case?

**a. Femoral neck fracture**

- b. Hip dislocation
- c. Pubic fracture
- d. Damaged hip joint ligament
- e. Hip joint contusion

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

**a. Systemic scleroderma**

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

920. In the demographic structure of a region, the persons aged from 0 to 14 make up 31% of the population, while the 50+ age group makes up 20% of the population. What population structure characterizes this demographic situation most accurately?

- a. Stationary population
- b. Migration of the population
- c. Emigration of the population

#### d. Expansive population

#### e. Constrictive population

921. In the morning upon waking a 65-year-old patient developed weakness in the right-side limbs, speech disorder, decreased sensitivity of the left side of the body. On examination: conscious, BP- 100/60 mm Hg, motor aphasia, right-sided central hemiparesis and hemihypalgesia. Make the preliminary diagnosis:

- a. Brain tumor
- b. Encephalitis
- c. Subarachnoid hemorrhage

#### d. Ischemic stroke

#### e. Hemorrhagic stroke

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

#### a. Meningism

#### b. Purulent meningitis

- c. Brain tumor
- d. Serous meningitis
- e. Encephalitis

923. A 30-year-old man was delivered to a neurosurgical department with complaints of constant headaches, nausea, vomiting, fever, weakness of the right-side limbs. Anamnesis states that one month ago the patient had a surgery for left-sided suppurative otitis and mastoiditis. He has been undergoing treatment in an ENT department. Approximately 2 weeks ago the temperature increased, and the patient developed headaches. Objectively: heart rate - 98/min., BP- 140/90 mm Hg, temperature - 38,3<sup>o</sup>C) Neurologically pronounced stiff neck: bilateral Kernig's symptom, unsteadiness during the Romberg's maneuver. Computer tomography of the brain revealed a three-dimensional growth with a capsule in the left hemisphere. Make the diagnosis:

- a. Hemorrhage
- b. Echinococcus

#### c. Cerebral abscess

- d. Arnold-Chiari malformation
- e. Hydrocephalus

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

#### a. Oculopharyngeal muscular dystrophy

#### b. Myasthenia

- c. Olivopontocerebellar atrophy
- d. Kearns-Sayre syndrome
- e. Progressive supranuclear ophthalmoplegia

925. A 3-week-old infant developed large, flaccid vesicles with purulent contents on the skin of chest and abdomen. The vesicles rupture quickly. Make the provisional diagnosis:

#### a. Pemphigus neonatorum

- b. Pseudofurunculosis
- c. Vesiculopustulosis
- d. Pemphigus syphiliticus
- e. Toxic erythema

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

- a. "Fat-burning" methods
- b. Dehydration therapy
- c. Anorectic drugs
- d. Sanatorium-and-spa treatment

**e. Reducing diet and exercise**

927. A 3-year-old child was hospitalized with generalized tonic-clonic seizures that last 50 minutes already and occurred against the background of hyperthermic syndrome caused by influenza. The child was receiving no therapy. What aid must be provided for urgent treatment of the seizure syndrome in this case?

- a. Urgently apply cold compresses
- b. Prescribe paracetamol in age-appropriate doses
- c. Administer phenobarbital intramuscularly
- d. Administer calcium gluconate intravenously

**e. Administer lorazepam intravenously**

928. A well is dug on a rural landplot. It is located at the distance of 20 meters from the house, 10 meters from the toilet, and 15 meters from the neighbor's house. What is the minimum permissible distance between the well and the source of possible water pollution, according to the sanitary norms?

- a. 15 meters
- b. 30 meters**
- c. 10 meters
- d. 25 meters
- e. 20 meters

929. At a factory with harmful working conditions, a complex of measures is being taken to reduce the morbidity among the workers. For better effect, the factory doctor separately monitors a group of people, who fall ill frequently and for a long time. What type of morbidity requires distinguishing such a group of people?

- a. Morbidity associated with major non- communicable diseases
- b. Morbidity associated with acute infections
- c. General morbidity
- d. Hospitalized morbidity

**e. Morbidity with temporary disability**

930. A 5-day-old child has diffuse erythema, vesicles, erosions, cracks, and peeling of the epidermis. The boy looks as if he were scalded with boiling water. During examination, the child's general condition is extremely severe. The child is markedly anxious and refuses to eat. The body temperature is 39.8°C. The Nikolsky sign is positive. Hyperesthesia is observed. What is the most likely diagnosis in this case?

- a. Mycotic erythema
- b. Neonatal pemphigus

**c. Exfoliative dermatitis**

- d. Phlegmon of the newborn
- e. Finger's pseudofurunculosis (Abscessus multiplex infantum)

931. Disease onset was acute. A child developed general weakness, pain in the joints, and fever. Later these signs became accompanied by itching skin rash manifested as erythematous spots 2-5 mm in size. The rash gradually turned hemorrhagic. Large joints are painful and swollen; pain attacks periodically occur in the paraumbilical area; there are signs of intestinal hemorrhage. What is the most likely diagnosis?

- a. Streptococcal impetigo
- b. Hemorrhagic meningococcal sepsis

**c. Hemorrhagic vasculitis (Henoch-Schönlein purpura)**

- d. Scarlet fever
- e. Rheumatism

932. A 30-year-old patient complains of nausea, abdominal distension, vomiting, urination disorders accompanied by cutting pain and blood in urine, and intense paroxysmal pain in the lumbar region on the right that radiates into the inguinal region and to the inner surface of the right thigh. Objectively,

the patient is restless, changes position in the bed. No pathology was detected in the respiratory organs and cardiovascular system. Palpation of the abdomen detects distension, muscle tension, and tenderness on the right, in the projection of the right kidney and along the right ureter. The liver and spleen are not enlarged. Signs of gallbladder inflammation are negative. The sign of costovertebral angle tenderness (Pasternatski's sign) is positive on the right. What is the most likely diagnosis in this case?

**a. Urolithiasis**

- b. Kidney tuberculosis
- c. Glomerulonephritis
- d. Kidney tumor
- e. Cholelithiasis

933. A 9-month-old child with an acute respiratory viral infection was receiving antipyretics in a syrup for 2 days. On the second day, the parents note that their child has developed skin redness, neck edema, hoarseness of the voice, barking cough, difficulty breathing, and agitation. In the family's medical history, the atopic anamnesis is complicated on the father's side. What is the most likely diagnosis in this case?

- a. Acute epiglottitis
- b. Acute stenosing laryngitis

**c. Quincke's edema**

- d. Bronchiolitis
- e. Urticaria

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

**a. Radar chart**

- b. Pie chart
- c. Bar chart
- d. Map
- e. Cartogram

935. A 45-year-old woman complains of discomfort during reading, redness of the edges of her eyelids, and white foamy discharge in the corners of her palpebral fissures, observed for the past two months. Objectively, the following is observed: hyperemia and thickening of the loose eyelid margins, widened excretory ducts of the glands in the eyelid cartilage. What is the most likely diagnosis in this case?

- a. Adenoviral conjunctivitis
- b. Acute dacryoadenitis

**c. Meibomian blepharitis**

- d. Blepharitis
- e. Chronic canaliculitis

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

- a. Recurrent myocardial infarction
- b. Aortic aneurysm with aortic dissection
- c. Stable exertional angina pectoris, FC II

**d. Stable exertional angina pectoris, FC IV**

- e. Unstable angina pectoris

937. Annual report of an in-patient ward presents data about the number of patient days and the number of patients, who have undergone treatment within a year. What work indicator of the in-patient ward can be calculated based on these data?

- a. Hospital bed turnover rate



b. Average duration of in-patient treatment of a patient

c. Bed occupancy rate

d. Efficient use of the hospital bed capacity

e. Mortality

938. What is a sign of biological death?

a. Algor mortis

b. Absence of breathing

c. Absence of heartbeat

d. Absence of pulse

e. Absence of consciousness

939. A parturient woman is 30 years old, stage I of the labor is ongoing. The fetus is in the cephalic presentation. Auscultation of the fetal heart sounds detects bradycardia. Evaluation of cardiotocogram yielded the following data: decrease of basal heart rate down to 90/min., variability - monotonous (2 and less); late decelerations with amplitude of 50/min. Make the diagnosis and choose the obstetrical tactics necessary in this case:

a. Normal condition of the fetus. Vaginal birth

b. Fetal distress. Stimulation of uterine contractions

c. Fetal distress. Urgent cesarean section delivery

d. Fetal distress. Forceps delivery

e. Fetal distress. Vacuum extraction delivery

940. 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. Myocardiodystrophy

b. Primary rheumatic carditis

c. Cardiomyopathy

d. Nonrheumatic myocarditis

e. Fallot's tetrad

941. A 2-month-old child has seizures and recurrent viral and bacterial infections of the upper respiratory tracts. A deformed skull and hypoplasia of the thymus and parathyroid glands were detected in the child. Immunological laboratory studies revealed lymphocytopenia, normal levels of immunoglobulins, and decreased levels of T lymphocytes with their proliferative response reduced. What is the most likely diagnosis in this case?

a. Common variable immunodeficiency

b. Primary immunodeficiency, Chediak-Higashi syndrome

c. Primary immunodeficiency, Bruton disease

d. -

e. Primary immunodeficiency, DiGeorge syndrome

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

a. Prescription of procainamide

b. Prescription of bisoprolol

c. Pacemaker implantation

d. Prescription of amiodarone

e. Prescription of digoxin

943. A 45-year-old patient complains of a skin rash on the trunk and upper and lower limbs. The patient associates the development of this rash with a recently experienced stressful situation. Objectively, there are inflammatory papules on the skin, which have a tendency to spread and are covered with loose silvery-yellow scales. When elements of the rash are scraped, the "stearin spot" symptom is observed. The patient's genealogical history is normal. What is the most likely diagnosis in this case?

a. Lichen ruber planus

b. Psoriasis

- c. Dermatophytosis
- d. Allergic dermatitis
- e. Eczema

944. A 25-year-old woman at 34 weeks of pregnancy was hospitalized in a critical condition into the maternity clinic. She complains of headache, vision impairment, and nausea. Objectively, she has edemas, her blood pressure is 170/130 mm Hg. Suddenly, the woman developed fibrillar twitching of her facial muscles, tonic and clonic seizures, and respiratory arrest. One and a half minutes later her breathing resumed and blood-tinged foam appeared from her mouth. Her urinary protein levels are 3.5 g/L. Make the diagnosis:

a. Epilepsy

**b. Eclampsia**

- c. Gastric ulcer
- d. Brain edema
- e. Brain hemorrhage

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

**a. Manganese**

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

946. An ambulance has brought in the victim of an accident, who has fallen from a height. This person has clinical signs of multiple fractures in the both legs. Objectively, the patient's condition is severe; the patient is conscious, but mentally sluggish; the skin is pale gray; the forehead is covered in a cold sweat. The patient's breathing is shallow, with respiratory rate of 30/min., blood pressure - 80/60 mm Hg, pulse - 120/min., shallow. What complication has occurred in this person?

- a. Traumatic shock, degree 4
- b. Traumatic shock, degree 1

**c. Traumatic shock, degree 2**

- d. Syncope
- e. Traumatic shock, degree 3

947. A 6-month-old child started refusing to eat and developed an acute fever of 39°C, vomiting, and short-term tonic-clonic seizures. Objectively, the child is sluggish and sleepy. Nuchal rigidity, Kernig's signs, and a bulging and tense fontanel are observed. What laboratory and instrumental study is necessary to confirm the diagnosis in this case?

- a. Brain MRI
- b. Skull X-ray
- c. Serum biochemistry profile

**d. Lumbar puncture**

e. Neurosonography

948. A 13-year-old girl for the last two weeks has been complaining of dyspnea and shin and foot edemas that appear after a physical exertion. In the morning the edemas significantly decrease. Clinical examination revealed enlarged liver and coarse systolic murmur over the heart area. Blood test and urinalysis are without changes. What is the most likely cause of edemas in this child?

a. Acute pyelonephritis

**b. Heart failure**

- c. Nephrotic syndrome
- d. Hepatic cirrhosis
- e. Angioneurotic edema

949. A man suddenly developed a sharp retrosternal pain that radiated into the left arm. Objectively, the patient was excited, his skin was pale, the respiration rate was 38/min., the blood pressure was 180/110 mm Hg. Later he lost his consciousness, fell down, the pulse on the major vessels could not

be detected, the pupils were evenly dilated. What is the diagnosis in this case?

- a. Coma
- b. Heart attack
- c. Agonal state
- d. Clinical death**

e. Cerebral circulation disorder

950. A 30-year-old woman complains of subfebrile body temperature that persists for the last 3 weeks, loss of appetite and working ability, excessive sweating (especially at night), malaise. Objectively, her pulmonary percussion indicates no changes in the lungs, auscultation detects crackles in the projection of the upper lobe of the right lung. X-ray shows a dense focus of moderate intensity, 6 mm in diameter, in segment S2. Make the provisional diagnosis:

- a. Pulmonary tuberculoma
- b. Metastatic lung cancer
- c. Community-acquired pneumonia

**d. Focal pulmonary tuberculosis**

e. Peripheral lung cancer

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

**a. Femoral neck fracture**

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

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

**a. Typhoid fever**

- b. Pseudotuberculosis
- c. Typhus
- d. Leptospirosis
- e. Influenza

953. A patient has been provisionally diagnosed with pheochromocytoma at the stage of intermission. BP is within norm, there is a tendency towards tachycardia. No urine pathologies. The decision has been made to perform a provocative test with histamine. What drug should be kept close at hand for emergency aid in case of positive test result?

- a. Prednisolone
- b. Nifedipine
- c. Pipolphen
- d. Mesaton (Phenylephrine)

**e. Phentolamine**

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

**a. Hymenal atresia**

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

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

- a. Childbirth through the natural birth canal
- b. Labor stimulation

**c. Urgent caesarean section**

- d. Continuation of pregnancy
- e. Breech extraction

956. A 52-year-old man for the last 3 years has been suffering from difficult swallowing of solid food, burning retrosternal pain that aggravated during eating, loss of body mass, and occasional vomiting with undigested food. Esophageal X-ray shows S-shaped deformation of the esophagus and its dilation; at the cardiac orifice the esophagus is constricted; esophageal mucosa is smooth, without signs of peristalsis. Make the provisional diagnosis:

- a. Reflux esophagitis
- b. Diaphragmatic hernia
- c. Esophageal diverticulum
- d. Esophageal achalasia

**e. Esophageal carcinoma**

957. A 15-year-old patient developed signs of diastolic heart failure against the background of hypertrophic cardiomyopathy. Echocardiography shows symmetrical hypertrophy of the myocardium of the ventricles, the contractility is satisfactory. What treatment tactics would be optimal in this case?

- a. beta<sub>2</sub>-adrenomimetics
- b. Peripheral vasodilators

**c. beta-blockers**

- d. Cardiac glycosides
- e. alpha-blockers

958. A planner designs a heating system for a pre-school educational establishment. The highest air temperature should be in the following room:

- a. Bedroom of a nursery group

**b. Game room of a nursery group**

- c. Common room of a preschool group
- d. Bedroom of a preschool group
- e. Gymnasium

959. A 30-year-old man has received second-degree burns that cover 40% of his body. On the fourth day after the injury, his general condition acutely deteriorated. He developed inspiratory dyspnea, frequent cough with frothy sputum, and cyanotic skin. Auscultation detects numerous wet crackles in the lungs. His blood pressure is 110/60 mm Hg, heart rate - 100/min., respiration rate - 32/min., central venous pressure - 100 mm H<sub>2</sub>O, total protein - 50 g/L, Ht - 30%, Hb - 90 g/L. ECG shows sinus tachycardia. What mechanism of pulmonary edema pathogenesis is the main one in this case?

- a. Pulmonary hypoventilation
- b. Decreased contractility of the myocardium
- c. Hypervolemia of the pulmonary circulation

**d. Decreased plasma osmotic pressure**

- e. Surfactant dysfunction

960. During medical examination, a port crane operator complains of dizziness, nausea, a feeling of pressure in his eardrums, tremor, asphyxia, and cough. He works at a high altitude associated with nervous and emotional strain. Additionally, the workers are exposed to vibration (general and local), noise, infrasound, and a microclimate that heats them in summer and cools them in winter. What factor is the most likely cause of the worker's complaints?

**a. Infrasound**

- b. Strenuous work
- c. Work at a high altitude
- d. Vibration

e. Noise

961. A 4-day-old boy developed signs of hemorrhagic disease of the newborn in the form of melena. What drug should the doctor have prescribed in the first hours of life to prevent this disease?

a. Vitamin K

b. Aminocaproic acid

c. Vitamin C

d. Calcium gluconate

e. Ethamsylate

962. During the last week a 26-year-old woman started doing many things that were new and unusual for her. In particular, she started painting the walls in the house entranceway on her own and was writing poems at night, while making illustrations for them. Objectively, she is talkative, quickly changes topics of conversation, actively gestures, jokes, and flirts with men. She believes that she could have been a great actress, writer, and artist, and invites everyone to attend her evening "art recitals". What psychopathological condition is observed in the patient?

a. Pseudoparalytic dementia

b. Manic syndrome

c. Excited catatonia

d. Hysterical neurosis syndrome

e. Hebephrenic syndrome

963. A 75-year-old man in a severe condition suffers from dyspnea at rest, marked weakness, and arrhythmia. Abdominal aortic pulsation is observed, further on there is a systolic murmur detected. Palpation reveals a volumetric formation in the mesogastrium. Blood pressure is 70/40 mm Hg. There is no pulsation over the femoral arteries. Oliguria is detected. Which diagnosis is the correct one?

a. Cardiosclerotic aneurysm

b. Acute pericarditis

c. Dissecting aortic aneurysm

d. Pancreatic cyst

e. Acute cardiac aneurysm

964. Throughout the working day, a worker was performing electric welding (joining metal constructions). Because of poor lighting in the welding area and because he was working in an uncomfortable position, the worker was not using his protective screen and mask. A few hours later, the worker developed complaints of "sand in the eyes", pain, burning, lacrimation, and photophobia. What occupational factor could have caused these symptoms?

a. Effect of welding aerosols

b. Extreme ultraviolet radiation

c. Strain of the visual analyzer

d. Inadequate lighting

e. Duration of the working time

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

a. Antagonism

b. Complex action

c. Synergistic action

d. Isolated action

e. Potentiation

966. A 3-year-old boy was hospitalized in a severe condition. Objectively, he has somnolence, hyperreflexia, convulsions, hyperesthesia, and intractable vomiting. His body temperature is 39.9°C, heart rate - 160/min., blood pressure - 80/40 mm Hg. What test must be conducted first in this case?

a. Echoencephalography

b. Rheoencephalography

c. Cranial CT scan

d. Skull X-ray

e. Lumbar puncture

967. A 55-year-old man complains of a pain in the sternum, lumbar spine, and ribs. He has a history

of bone fracture in his right shin. In the blood: total protein - 100 g/L, M-gradient is positive. In the urine there is Bence Jones protein. Make the diagnosis:

- a. Multiple myeloma
- b. Exertional angina pectoris, 2 FC
- c. Osteochondrosis
- d. Glomerulonephritis
- e. Neuralgia

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

- a. Acute Bartholinitis
- b. Acute vulvitis
- c. Fibroma of the vulva
- d. Acute vaginitis
- e. Bartholin gland cyst

969. A 64-year-old patient has been diagnosed with type 2 diabetes mellitus for the first time. The patient has a history of arterial hypertension, myocardial infarction, functional class II heart failure, chronic pancreatitis, pyelonephritis, and gout. The doctor decided to start the patient's therapy with metformin. What test must be performed before starting this therapy to avoid using metformin if it is contraindicated?

- a. Blood uric acid
- b. Hepatic amylase and lipase levels in the blood
- c. Left ventricular ejection fraction
- d. ECG

e. Calculation of glomerular filtration rate (GFR)

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

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

971. An 18-year-old woman complains of mammary glands swelling, headaches, tearfulness, abdominal distension occurring the day before menstruation. The symptoms disappear with the beginning of menstruation. Menstruations are regular, last for 5-6 days with interval of 28 days in between. Gynecological examination revealed no changes of internal genitals. What is your diagnosis?

- a. Asherman's syndrome
- b. Adrenogenital syndrome

c. Premenstrual syndrome

- d. Stein-Leventhal syndrome
- e. Sheehan syndrome

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

- a. Chronic pancreatitis
- b. Chronic cholangitis
- c. Chronic cholecystitis



#### d. Biliary dyskinesia

#### e. Duodenitis

973. A 45-year-old woman undergoes an inpatient treatment. She complains of elevated body temperature up to  $39.0^{\circ}\text{C}$ , pain in her right lumbar area, turbid urine with blood. CT scan shows an area of low density within the parenchyma, no difference between the cortical and medullary layers, and increased density of the perinephric fat due to edema. What is the diagnosis?

#### a. Glomerulonephritis

#### b. Pyelonephritis

#### c. Renal carcinoma

#### d. Paranephritis

#### e. Renal abscess

974. A 13-year-old boy complains of a dry cough and shortness of breath. The onset of the disease was one year ago. He has brief asphyxia attacks that occur 1-2 times per month. Objectively, the child is anxious and has expiratory dyspnea, his skin is pale, his nasolabial triangle is cyanotic. His respiratory rate is 48/min. Percussion produces a banbox resonance over the lungs; auscultation detects weakened breathing with bilateral dry wheezing. Forced expiratory volume is 80% of the normal. What medicine should be prescribed to this boy?

#### a. Prednisolone

#### b. Euphyllin (Aminophylline)

#### c. Indomethacin

#### d. Suprastin (Chloropyramine)

#### e. Salbutamol

975. A 28-year-old man is undergoing a treatment for pulmonary tuberculosis. He complains of shortness of breath and a sharp chest pain on the right that appeared suddenly. Percussion detects a bandbox resonance over the right lung, auscultation detects no breathing there. X-ray shows that the right lung is collapsed to its root by 1/2 of its volume, the heart and mediastinal organs are shifted to the left. What complication has developed in this patient?

#### a. Dry pleurisy

#### b. Pulmonary infarction

#### c. Spontaneous pneumothorax

#### d. Pleural empyema

#### e. Exudative pleurisy

976. A 35-year-old woman came to the family doctor with complaints of profuse menstruations that last up to 10 days. Gynecological examination shows that the uterine cervix is without changes, the uterus is in emphanterflexio, has normal size, is mobile and painless. The uterine appendages on the both sides are without peculiarities. The family doctor made the provisional diagnosis of abnormal uterine bleeding. What instrumental method of examination needs to be performed first to diagnose this pathology?

#### a. Transabdominal ultrasound

#### b. Laparoscopy

#### c. Culdoscopy

#### d. Colposcopy

#### e. Transvaginal ultrasound

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

#### a. Cholera

#### b. Shigellosis

#### c. Rotavirus gastroenteritis

#### d. Foodborne toxic infection

#### e. Salmonellosis

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

a. Obliterating aortoarteritis

b. Neurological amyotrophy

c. Arterial thrombosis of the left arm

d. Dermatomyositis

e. Systemic lupus erythematosus

979. A 30-year-old woman on the fifth day after the physiological childbirth complained of swelling of her left breast, pain, reddened skin, and a fever of  $38^{\circ}\text{C}$ . Objectively, her left mammary gland is enlarged, the skin there is red, with cyanosis in the upper-outer quadrant. A sharply painful infiltrate without clear borders can be palpated. Expressing milk does not bring relief. What is the most likely diagnosis in this case?

a. Erysipelas

b. Acute infiltrative mastitis

c. Infected breast cyst

d. Breast cancer

e. Lactostasis

980. A 58-year-old man complains of weakness, edema of the face, legs, and lumbar region, dyspnea, and wet cough. For many years he has been suffering from chronic obstructive pulmonary disease. Within the last 5 years he has been noting increased production of sputum that often is purulent. Objectively, his heart rate is 80/min., blood pressure is 120/80 mm Hg. He has pale and dry skin with poor turgor and diffuse edema. Daily proteinuria is 6.6 g/L. In the blood: hypoalbuminemia, increased levels of alpha-2 and gamma globulins, ESR is 50 mm/hour. Blood creatinine is 188  $\mu\text{mol/L}$ . Which diagnosis is the correct one?

a. Secondary renal amyloidosis, azotemic stage

b. Senile amyloidosis

c. Secondary renal amyloidosis, nephrotic syndrome

d. Secondary renal amyloidosis, proteinuric stage

e. Primary amyloidosis

981. A 51-year-old man after an overexposure to cold has developed an acute pain in his lower abdomen and a burning pain that occurs at the end of urination. Urination occurs up to 15 times per 24 hours. The urine is turbid and contains blood. Clinical urinalysis shows leukocytes in the whole vision field and isolated erythrocytes. What provisional diagnosis can be made?

a. Acute glomerulonephritis

b. Urolithiasis

c. Acute urethritis

d. Acute pyelonephritis

e. Acute cystitis

982. A four-month-old child suddenly became ill. The following symptoms have appeared: an increase of the body temperature to  $38.5^{\circ}\text{C}$ , one-time vomiting, lethargy. In 10 hours, on the buttocks and lower limbs appeared a rash in the form of petechiae, spots and pustules. Some hemorrhagic elements are with necrosis in the center. What disease is most likely present in this child?

a. Rubella

b. Scarlet fever

c. Meningococcemia

d. Hemorrhagic vasculitis

e. Flu

983. A 70-year-old patient complains of general weakness, loss of appetite, pain in the tongue, and paresthesia. According to the patient's medical history, the disease onset was 6 months ago. Objectively, the skin and mucosa are pale and moderately icteric, the tongue is bright red and

smooth, hepatomegaly and distal hyperesthesia are observed. Auscultation detects a systolic murmur in all auscultation points. Pulse - 110/min., blood pressure - 90/60 mm Hg. Blood test results: erythrocytes -  $1.2 \cdot 10^{12}/L$ , hemoglobin - 56 g/L, color index - 1.4, leukocytes -  $2.8 \cdot 10^9/L$ , platelets -  $120 \cdot 10^9/L$ , ESR - 26 mm/hour, reticulocytes - 0.1%, macrocytosis, total bilirubin - 34 mmol/L, indirect bilirubin - 29 mmol/L. What is the most likely diagnosis in this case?

- a. Infectious mononucleosis
- b. Acute lymphoblastic leukemia
- c. Iron deficiency anemia
- d. Viral hepatitis A

**e. Vitamin B<sub>12</sub> deficiency anemia**

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

- a. Iridocyclitis
- b. Hemophthalmus
- c. Scleritis

**d. Acute glaucoma attack**

e. Conjunctivitis

985. During the examination of a deceased person at the site of an accident, a doctor detected gray-yellow triangular areas in the corners of the eye on the cornea. What phenomenon is observed by the doctor?

a. Louis sign (corneal clouding)

**b. Larcher spots**

- c. Idiomuscular tumor
- d. Kayser-Fleischer ring
- e. Beloglazov sign ("cat's eye")

986. A 17-year-old girl has been suffering from hepatic cirrhosis for 3 years. Lately her periods of excitation have been intermittent with depression, she does not sleep enough. Objectively, her condition is severe, the girl is sluggish, gives one-word responses, has tremor in her extremities, her skin is icteric, with single hemorrhagic rashes. Name the likely complication of her disease:

- a. Reye syndrome
- b. Kidney failure
- c. Sepsis
- d. Bipolar affective disorder

**e. Hepatic encephalopathy**

987. A woman at 12 weeks of her pregnancy developed a pain in her lower abdomen and mild bloody discharge that occurred with no apparent reason. Vaginal examination shows well-formed cervix with closed external orifice. The body of the uterus is enlarged according to her term of pregnancy. Make the diagnosis:

- a. Incomplete miscarriage
- b. Ongoing miscarriage
- c. Imminent miscarriage

**d. Threatened miscarriage**

e. Anembryonic pregnancy

988. A 44-year-old woman complains of generally feeling unwell, chills, a fever of  $39^{\circ}C$ , and constant burning pain, skin redness, and edema in the area of her left lower leg. The onset of the disease she associates with a scratch on the skin of her left lower leg that she received two days ago. Objectively, in the middle third of the left lower leg, there is a bright area of skin hyperemia with clear borders raised above the unchanged skin. Moderate edema of soft tissues is observed, the soft tissues are painful during palpation. In the center of the hyperemic skin, there is a scab  $2 \times 0.2$  cm in size that covers a small superficial wound. What complication of microtrauma of the left lower leg is observed in the patient?

a. Acute deep vein thrombophlebitis

**b. Erysipelas**

- c. Gas gangrene
- d. Acute purulent osteomyelitis
- e. Phlegmon

989. A 44-year-old man had been drinking 0.5-0.8 liters of vodka every day for 6 days prior to seeking help of a psychiatrist. On the third day at night, he could not sleep, became anxious, believed that he was "at a factory", and complained that he could see "a horror movie on the wall" and heard screams from the street with threats to kill him. What is the most likely diagnosis in this case?

- a. Somatogenic psychosis
- b. Obsessive-phobic neurosis
- c. Alcoholic hallucinosis
- d. Occupational delirium

**e. Delirium tremens**

990. During the study of pulmonary tuberculosis morbidity, the data on socio-economic living conditions and harmful habits of the patients were obtained. What method allows the assessment of the extent to which these factors influence the tuberculosis morbidity?

- a. Calculation of the agreement coefficient
- b. Calculation of the confidence coefficient
- c. Calculation of the regression coefficient

**d. Calculation of the correlation coefficient**

- e. Calculation of standardized indicators

991. A 65-year-old patient with a history of arterial hypertension complains of dizziness and palpitations that occurred throughout the last hour. Objectively, the following is observed: blood pressure - 80/40 mm Hg, heart rate - 150/min., pulse - 106/min. ECG revealed missing P wave and varying RR intervals, ventricular contraction rate is 136-148/min. What aid must be provided to the patient first?

- a. Prescription of amiodarone intravenously
- b. Prescription of beta-blockers intravenously

**c. Urgent electrical cardioversion**

- d. Pacemaker implantation
- e. Prescription of calcium channel blockers intravenously

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

- a. Hyperazotemia
- b. Acidosis
- c. Hyponatremia
- d. Alkalosis

**e. Hyperkalemia**

993. A 13-year-old girl has 30% of excessive body mass, she started to gain weight at the age of 3. She has a family history of obesity. Her height and sexual development are normal for her age. The appetite is excessive. She complains of periodical headaches. Blood pressure - 120/80 mm Hg. Subcutaneous fat is evenly distributed, she has no stretch marks. There is juvenile acne on her face. What type of obesity is it?

**a. Alimentary constitutive obesity**

- b. Hypothalamic syndrome of puberty
- c. Hypothalamic obesity
- d. Hypothyroid obesity
- e. Adrenal obesity

994. A woman has been working as a polisher for a year and a half. Her workstation is equipped with a grinding machine (grinding wheels). She complains of white discoloration of her fingers and toes that appears when she is nervous. Objectively there are no changes in the coloration of the distal segments of her limbs. Grip strength measured with a dynamometer is 25 kg, algesimetry findings are 0.1; 0.3; 0.5. Cold stimulus is extremely positive on the upper and lower limbs. Internal organs are without pathologies. Make the diagnosis:

- a. Syringomyelia

- b. Raynaud syndrome
- c. Raynaud disease
- d. Polyneuritis

**e. Vibration disease**

995. Examination detected 24-hour proteinuria of 2.2 g in a 30-year-old woman. Biopsy revealed changes in the glomerular capillary walls in the shape of wire loops. What morphological form of kidney damage is indicated by the biopsy results?

- a. Membranous glomerulonephritis
- b. Mesangial glomerulonephritis

**c. Diffuse lupus glomerulonephritis**

- d. IgA nephropathy
- e. Nephrosclerosis

996. A 30-year-old woman complains of abdominal discomfort on the left, pain in the joints, fever, and periodic hemorrhages. Objectively, hepatolienal syndrome is observed. Complete blood count revealed the following: leukocytes -  $200 \cdot 10^9/L$ , numerous granulocytes at various degrees of maturity, myeloblasts -  $< 5\%$  in the bone marrow, the Rh-chromosome is positive. What is the most likely diagnosis in this case?

**a. Chronic myeloid leukemia**

- b. Leukemoid reaction
- c. Malignant tumor
- d. Acute leukemia
- e. Myelofibrosis

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

- a. Aspirin or clopidogrel
- b. Nootropics
- c. beta-blockers

**d. Oral anticoagulants**

- e. Calcium antagonists

998. A 3-year-old child has developed a cough and runny nose. Two other family members have the same signs. On the third day after the onset of the disease, the cough intensified and became dry and persistent. The temperature increased to  $37.8^{\circ}C$ . Objectively, the act of breathing involves the auxiliary muscles. Percussion produces a banbox resonance bilaterally in the lungs. Breathing is harsh, expiration is prolonged, there are moderate and large bubbling wheezes. The wheezes are diffuse and mostly wet, though in some places they are dry. Make the diagnosis:

**a. Acute obstructive bronchitis**

- b. Stenosing laryngotracheitis
- c. Bilateral bronchopneumonia
- d. Bronchial asthma
- e. Acute bronchiolitis

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

**a. Paralytic poliomyelitis**

- b. Polyradiculoneuritis
- c. Diphtheritic polyneuritis
- d. Botulism
- e. Influenza with associated encephalopathy

1000. A 23-year-old woman, who works as a milk and dairy inspector, after the miscarriage suffers from high fever up to  $38.6^{\circ}C$ , recurring chills, excessive sweating. Objectively: polyadenitis, pain in the lumbosacral spine, swollen left knee joint, enlarged liver and spleen. What diagnosis is most likely?

- a. Polyarticular rheumatoid arthritis

**b. Brucellosis**

- c. Yersiniosis
- d. Sepsis
- e. Toxoplasmosis

1001. A 48-year-old man complains of stool 2-3 times a day, with a large amount of foul-smelling feces, which is accompanied by a pain in the umbilical region, hair loss, and paresthesias. Examination shows pale skin, low body mass, and leg edema. Palpation of the umbilical region and intestine is painful. Blood test shows anemia; stool test shows steatorrhea, creatorrhea, amyloorrhea. What syndrome can be observed in the patient?

- a. Zollinger-Ellison syndrome
- b. Afferent loop syndrome
- c. Hypercatabolic exudative enteropathy syndrome
- d. Dumping syndrome

**e. Malabsorption syndrome**

1002. A 16-year-old boy developed dizziness. His heart rate is 35/min., blood pressure is 85/45 mm Hg. Heart borders are not enlarged. Heart sounds are loud and clear. ECG shows P waves disconnected from QRS complexes, dissociation and different rhythm of atria and ventricles is accompanied by varying location of P wave in relation to QRST complex. This presentation is the most characteristic of the following disease:

- a. Atrioventricular block (II degree)
- b. Extrasystole

**c. Complete atrioventricular block (III degree)**

- d. Atrioventricular dissociation
- e. Sinus bradycardia

1003. A 30-year-old patient complains of itching skin. The itch has been observed throughout the last week and intensifies in the evening. Examination detects a polymorphic rash consisting of small paired vesicles, punctate papules, excoriations, and red-brown inflammatory papules on the lateral surfaces of the hands and fingers and on the usually covered areas of the body (abdomen, buttocks, genitals). What is the most likely diagnosis in this case?

- a. Pediculosis

**b. Scabies**

- c. Psoriasis
- d. Syphilis
- e. Candidiasis

1004. Preventive examination of the population of one of the Ukrainian cities detected spotted tooth enamel and generalized osteosclerosis with calcification of the intervertebral ligaments in 25 % of the residents. What is the most likely cause of these symptoms?

**a. Excessive fluorine levels in water**

- b. Insufficient fluorine levels in soil and water
- c. Excessive fluorine levels in vegetable products
- d. Insufficient fluorine levels in animal products
- e. Insufficient fluorine intake with tea

1005. A 10-year-old boy had a case of viral hepatitis type B four years ago. Currently the assumption was made about the formation of hepatic cirrhosis in the patient. What additional investigation can clarify the diagnosis?

- a. Markers of viral hepatitis type B
- b. Transaminase level measurement

**c. Renal needle biopsy**

- d. Proteinogram
- e. Echocholecystography

1006. A 30-year-old patient has been hospitalized with diagnosis of intestinal obstruction. The surgery revealed the obstruction of the small intestine to be caused by a helminth ball. What kind of helminth is it?

- a. Guinea worm
- b. Pinworm



c. Filariidae

d. Ascaris

e. Cysticercus

1007. The following indicators were calculated to analyse population health and treatment quality in a cardiological hospital: primary cardiovascular morbidity - 62%; total cardiovascular morbidity - 483,55%; cardiovascular mortality - 10,9%; proportion of cardiovascular mortality within total mortality - 67,0%; primary disablement caused by cardiovascular diseases - 16,2 per 10.000 population. What indicator is an extensive value?

a. Primary cardiovascular morbidity

b. Proportion of cardiovascular mortality within total mortality

c. Total cardiovascular morbidity

d. Cardiovascular mortality

e. Primary disablement caused by cardiovascular diseases

1008. A patient complains of chest pain on the right, shortness of breath, and cough that produces a large amount of purulent sputum. Objectively, cyanosis of the skin is observed, heart rate - 116/min., body temperature - 39.8°C. The right half of the chest lags behind in the act of breathing. Dullness of the percussion sound and weakened breathing can be detected on the right. Chest X-ray shows homogeneous darkening of the right half of the chest. What is the most likely diagnosis in this case?

a. Right-sided exudative pleurisy

b. Right-sided pneumothorax

c. Bronchiectasis

d. Abscess of the right lung

e. Pleural empyema

1009. A 30-year-old woman complains of fever of 38.7°C, pain in the lower abdomen, and dysuric disorders. She has history of an artificial abortion performed 3 days ago. Bimanual examination detects that the cervix is cylindrical, the opening is closed, the body of the uterus is slightly enlarged, painful, and soft. The uterine appendages are not palpable. Purulent-hemorrhagic discharge is being produced. Blood test results: leukocytes -  $10 \cdot 10^9/L$ , band neutrophils - 12%. What is the most likely diagnosis in this case?

a. Acute endometritis

b. Acute salpingo-oophoritis

c. Endometriosis

d. Acute cystitis

e. Pelvioperitonitis

1010. On the 3rd day after the artificial abortion the woman was hospitalized into the gynecological department in a severe condition with signs of intoxication, abdominal pain, and purulent discharge from the vagina. Objectively, the patient's condition is severe, her body temperature is 38.8°C, pulse is 100/min., blood pressure is 110/70 mm Hg, the uterus is soft, the uterine fundus is located at the level of the navel, there are positive signs of peritoneal irritation. What is the most likely diagnosis?

a. Acute metroendometritis

b. Ectopic pregnancy

c. Uterine perforation

d. Acute suppurative salpingo-oophoritis

e. Pelviperitonitis

1011. The burns unit received a patient, who 6 hours ago during a fire received flame burns. On the patient's body there is gray-brown area of necrosis that covers 3/4 of the body perimeter. Occasionally there are small blisters with hemorrhagic contents and patches of shredded epidermis. What local therapy is necessary in this case?

a. Decompression necrectomy

b. Necrectomy with xenotransplantation

c. Chemical necrolysis

d. Necrectomy with dermal autograft

e. Blister puncture

1012. The dispatching department of the Center for Emergency Medical Care and Disaster Medicine

received a call from a local citizen, who complained of retrosternal constricting pains irradiating to the left hand. The taking of nitroglycerine brings no relief. Specify the terms within which an emergency medical team should arrive in this case:

- a. 20 minutes after the call was made
- b. 10 minutes after the call was made**
- c. 30 minutes after the call was made
- d. 60 minutes after the call was made
- e. 15 minutes after the call was made

1013. 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  $\mu\text{mol/l}$ , direct bilirubin - 112  $\mu\text{mol/l}$ . On US: choledoch duct - 1,4 cm, a concrement is detected in the distal area. Gallbladder is 40 cm, no concrements. What treatment tactics should be chosen?

- a. Laparoscopic cholecystectomy
- b. Laparotomy with choledoch duct drain
- c. Laparotomy with cholecystectomy
- d. Treatment in an infectious diseases hospital
- e. Endoscopic papillosphincterotomy**

1014. Employees work in conditions of high dust concentration. Certain chemical (silicon dioxide content) and physical properties of dust aerosols contribute to the development of occupational dust-induced diseases. What is the main physical property of dust aerosols?

- a. Solubility
- b. Electric charge
- c. Magnetization
- d. Ionization
- e. Dispersion**

1015. A 67-year-old woman complains of weakness in her arms, heaviness in her legs, and twitching in the muscles of her limbs. According to the patient's medical history, the disease onset was approximately 10 months ago, when she first developed weakness in her arms. Objectively, marked hypotrophy is observed in the arm muscles, as well as diffuse muscle fasciculations in the limbs, mainly in the arms. A muscle strength decrease that reaches 2 points is observed in the arms, while in the legs the muscle strength is preserved. Deep reflexes are significantly overactive in the limbs. Foot clonus is observed on both sides. Babinski's pathological reflex is observed on both sides. There were no sensory or coordination disorders detected, as well as no pelvic organ dysfunction. What is the most likely diagnosis in this case?

- a. Spinal muscular atrophy
- b. Tuberculous meningitis
- c. Syphilitic meningoencephalitis
- d. Amyotrophic lateral sclerosis**
- e. Myasthenia

1016. A 26-year-old woman gave birth 6 months ago. She came to a maternity clinic, complaining that she has no menstruation. She is breastfeeding her baby. Vaginal examination revealed that the uterus is dense and of normal size. What is the most likely diagnosis in this case?

- a. Pregnancy
- b. Physiological amenorrhea**
- c. Asherman syndrome
- d. Sheehan syndrome
- e. Pseudoamenorrhea

1017. 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 IV
- b. Exertional angina pectoris, functional class II
- c. Somatoform autonomic dysfunction, hypertension type
- d. Alcoholic myocardiodystrophy

**e. Exertional angina pectoris, functional class III**

1018. 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: protein - 48 g/L; albumins - 28 g/L. What indicators of coprological analysis would accompany this syndrome?

- a. Large amount of starch grains and cellulose
- b. Large numbers of iodophilous microbes
- c. Large amount of mucus, amyloorrhea

**d. Steatorrhea, creatorrhea**

- e. Gas bubbles, acid reaction

1019. A 35-year-old patient complains of watery stools with mucus and blood that occur up to 10 times per 24 hours, constant cramping abdominal pain, a fever of  $39^\circ C$ , and general weakness. According to the patient's medical history, the patient was taking clindamycin for a month for the treatment of osteomyelitis. Rectoromanoscopy visualizes gray-yellow plaques against the background of edematous and hyperemic mucosa of the sigmoid colon and rectum. What is the most likely diagnosis in this case?

- a. Shigellosis

**b. Pseudomembranous colitis**

- c. Nonspecific ulcerative colitis
- d. Crohn's disease
- e. Intestinal amebiasis

1020. A 35-year-old woman came to a doctor with complaints of shortness of breath, deteriorated vision ("a haze before her eyes"), double vision, strabismus, nystagmus, markedly dry mouth, nasal voice, difficulty swallowing, muscle weakness, and abdominal distension. According to her diet history, 20 hours ago she was eating canned meat and home-cooked fish. What is the most likely diagnosis in this case?

- a. Foodborne toxicoinfection
- b. Foodborne mycotoxicosis
- c. Food poisoning of chemical origin

**d. Botulism**

- e. Staphylococcal intoxication

1021. A 14-year-old girl developed morning fever, cheilitis, stomatitis, photosensitivity, leukocytosis of  $24 \cdot 10^9/L$ , and thrombocytopenia. Laboratory studies detect antinuclear antibodies in a high titer. Make the provisional diagnosis.

- a. Juvenile idiopathic arthritis

**b. Systemic lupus erythematosus**

- c. Sepsis
- d. Dermatomyositis
- e. Systemic scleroderma

1022. A 16-year-old patient has made an appointment with an otolaryngologist. He complains of elevated body temperature and sore throat. Disease onset was 2 days ago, after the patient ate two portions of ice-cream. Pharyngoscopy shows hyperemic mucosa of the palatine tonsils, with purulent exudate in the lacunae. Make the provisional diagnosis:

- a. Acute pharyngitis
- b. Diphtheria

**c. Lacunar tonsillitis**

- d. Pseudomembranous (Vincent's) tonsillitis
- e. Follicular tonsillitis

1023. In the factory cafeteria there was an outbreak of food poisoning. Clinical presentation indicates staphylococcal etiology of this disease. 15 people are sick. To confirm the diagnosis of food poisoning, samples need to be sent to the laboratory. What samples should be obtained for analysis?

**a. Vomitus masses**

- b. Saliva
- c. Urine

- d. Blood for hemoculture
- e. Blood (complete blood count)

1024. After the pregnant woman's waters broke, it was noted that they are significantly contaminated with meconium. Upon birth, the baby is not breathing, remains inert, the skin is cyanotic and covered in meconium, heart rate is 98/min. What resuscitation measures should be taken after the baby is born?

- a. Tactile stimulation of the newborn
- b. Sanation of the upper respiratory tracts with a rubber balloon
- c. Give adrenaline intravenously
- d. Artificial pulmonary ventilation with a mask and Ambu bag
- e. Direct laryngoscopy, intubation, sanation of the trachea

1025. A 28-year-old woman complaining of irregular menstruations and infertility came to the gynecological clinic. Menstruations occur since the age of 15, irregular, with delays up to 2 months. On examination she presents with marked hirsutism and excessive body weight. On vaginal examination the uterus is reduced in size and painless. The ovaries on the both sides are dense and enlarged. Ultrasound shows microcystic changes in the ovaries, the ovaries are 5x4 cm and 4.5x4 cm in size with dense ovarian capsule. Basal body temperature is monophasic. What is the most likely diagnosis?

- a. Polycystic ovary syndrome
- b. Krukenberg tumor
- c. Bilateral adnexitis
- d. Ovarian carcinoma
- e. Endometrioid cysts

1026. A 65-year-old patient was prescribed pharmacotherapy (ramipril, atorvastatin, amlodipine, acetylsalicylic acid, bisoprolol) for essential hypertension with concomitant ischemic heart disease. Two weeks later, he consulted a doctor about a dry cough. Examination detects no signs of acute respiratory viral infection or damage to the bronchopulmonary apparatus. A side effect of ramipril is suspected. What drug can be used to replace ramipril in the treatment plan?

- a. Nebivolol
- b. Torasemide
- c. Enalapril
- d. Valsartan
- e. Nifedipine

1027. A 58-year-old woman developed profuse bleeding from a ruptured varicose node on her left calf. What first aid would you provide in this case?

- a. Troyanov-Trendelenburg operation
- b. Z-shaped suture, applied to the ruptured varicose node
- c. Elevated position of the limb, a sterile compression bandage
- d. Tourniquet proximal to the source of bleeding
- e. Tourniquet distal to the source of bleeding

1028. A 20-year-old student after failing an exam developed complaints of a sensation of a round foreign body in her throat, difficult swallowing. She fixates on her condition, limits her diet, often cries, seeks attention, exhibits demonstrative attitude. She is highly susceptible to psychotherapeutic suggestion. What psychiatric diagnosis can be made in this case?

- a. Obsessive neurosis
- b. Depressive neurosis
- c. Hysterical neurosis
- d. Paranoid personality disorder
- e. Hypochondriacal neurosis

1029. An 8-year-old girl after a case of acute respiratory infection has been complaining for the last 2 weeks of a pain in the area of her heart and palpitations. Objectively, her body temperature is febrile, her skin is pale, the heart borders are extended to the left, heart rate is 142/min. The girl presents with paired atrial extrasystoles, dull heart sounds, and a low intensity systolic murmur that reaches its maximum at point 5. Make the provisional diagnosis:

- a. Congenital heart disease

- b. Somatoform vegetative dysfunction
- c. Endocarditis

**d. Myocarditis**

- e. Functional changes in the heart

1030. A 23-year-old patient complains of sharp pain in the throat on the left that radiates to the left ear, inability to open the mouth, a fever of 38.8°C, bad breath, and excessive salivation. Objectively, the following is observed: marked trismus of the masticatory muscles, facial asymmetry on the left. The left palatine tonsil is hyperemic and displaced to the middle of the pharynx, the uvula is displaced to the right. Hyperemia, infiltration, and edema are observed in the soft palate on the left. The retromandibular lymph nodes on the left are enlarged and painful to palpation. What is the most likely diagnosis in this case?

**a. Left-sided peritonsillar abscess**

- b. Tumor of the left palatine tonsil
- c. Diphtheria
- d. Submandibular lymphadenitis on the left
- e. Acute periodontitis

1031. A family doctor performed an external obstetrical examination of a pregnant woman and determined that her uterine fundus is located at the level of the navel. What is the most likely term of pregnancy in this woman?

- a. 8 weeks
- b. 40 weeks

**c. 24 weeks**

- d. 16 weeks
- e. 32 weeks

1032. A 30-year-old woman after an emotional upset developed tonic seizure that later gave place to clonic seizures. This condition was accompanied by loss of consciousness, foaming at the mouth, and involuntary urination. No focal signs were detected. Blood pressure is 120/60 mm Hg. Make the diagnosis:

- a. Eclampsia
- b. Stroke
- c. Syncope

**d. Epilepsy**

- e. Neurasthenia

1033. For the last 2 months, a 29-year-old woman has been complaining of chest pain on the left, cough, shortness of breath, and fever of 39.6°C. Objectively, the left half of her chest lags behind in the act of breathing, her vesicular respiration is weakened, and there is a shortening of the percussion sound on the left. X-ray shows a round shadow in the lower lobe of the left lung. Make the diagnosis:

- a. Chronic pneumonia
- b. Pleural empyema
- c. Lung cancer

**d. Lung abscess**

- e. Purulent pleurisy

1034. A 4-month-old boy has been undergoing in-patient treatment for pneumocystic pneumonia for 4 weeks. The diagnosis has been made based on clinical signs, typical X-ray presentation, presence of severe hypoxemia, positive dynamics caused by intravenous introduction of Biseptol (Co-trimoxazole). Anamnesis states that enzyme-linked immuno sorbent assay (ELISA) detected antibodies to HIV in the umbilical blood. Polymerase chain reaction (PCR) was performed on the child at the ages of 1 month and 3 months, and proviral DNA was detected in the child's blood. Viral load and number of CD4<sup>+</sup>-lymphocytes was not measured. Make the diagnosis:

- a. Adenovirus infection

**b. HIV/AIDS**

- c. Pneumonia
- d. Infectious mononucleosis
- e. Tuberculosis

1035. A boy suffering from bronchial asthma started to experience suffocation attacks several times a day. During the last attack, inhalation of astmopent (orciprenaline) had no effect. Intensive therapy was unable to stop the attack. The child was transferred into the intensive care unit with the diagnosis of II degree status asthmaticus. What was the leading mechanism of the development of this condition in the child?

- a. Edema of the bronchial mucosa
- b. Spasm of the bronchial smooth muscles
- c. Increased secretion of bioactive substances by mast cells
- d. Complete refractoriness (blockade) of beta-2-adrenoceptors**
- e. Inflammation of the bronchial mucosa

1036. When helping a man with a bleeding, the emergency physician has pricked his own finger. The patient is an injecting drug user, who underwent a test for HIV, but the results of the test are unknown. What measures must the doctor take in this case?

- a. Process the contaminated skin area, test the patient for HIV, start chemoprophylaxis**
- b. Process the contaminated skin area, start antiviral and antibiotic treatment
- c. Process the contaminated skin area, administer donor immunoglobulin
- d. Nothing needs to be done
- e. Process the contaminated skin area, examine the patient for TORCH infections, start antibiotic treatment

1037. A 38-year-old woman has episodes of paroxysmal hypertension that reaches 240/120 mm Hg and is accompanied by nausea, vomiting, tachycardia, and excessive sweating. Hyperglycemia is observed in the blood during such episodes. After the episode, profuse urination occurs. Renal sonography shows a new formation adjacent to the upper pole of the right kidney that might belong to the adrenal gland. What laboratory test will help clarify the diagnosis?

- a. Blood renin levels
- b. Urinary excretion of catecholamines and vanillylmandelic acid**
- c. Blood levels of insulin and C-peptide
- d. Blood levels of thyroxine and thyroid-stimulating hormone
- e. Glomerular filtration rate, measured using the endogenous creatinine clearance rate

1038. A 24-year-old woman, a kindergarten teacher, has been sick for 2 days already. Disease onset was acute. She presents with elevated body temperature up to  $38.0^{\circ}\text{C}$ , pain attacks in her lower left abdomen, liquid stool in small amounts with blood and mucus admixtures 10 times a day. Pulse - 98/min., blood pressure - 110/70 mm Hg. Her tongue is moist and coated with white deposits. The abdomen is soft, the sigmoid colon is painful and spastic. Make the provisional diagnosis:

- a. Rotavirus infection

**b. Shigellosis**

- c. Salmonellosis
- d. Yersiniosis
- e. Escherichiosis

1039. A 63-year-old woman complains of weakness without an obvious cause, fatigability, loss of appetite, and a feeling of disgust towards meat products. Two weeks ago she had a gastric bleeding. Objectively,  $t^{\circ}\text{C}$  -  $37.5^{\circ}\text{C}$ , respiratory rate - 20/min., pulse - 96/min., blood pressure - 110/75 mm Hg. Epigastric palpation detects pain and muscle tension. In the blood: Hb - 82 g/L, ESR - 35 mm/hour. What study would be the most useful for making a diagnosis?

- a. Gastric contents analysis
- b. Stool test
- c. X-ray

**d. Cytology**

- e. Endoscopy

1040. A 60-year-old man complains of mild disturbances of memory, coordination, gait. Cerebral atherosclerosis was confirmed. Blood pressure is within the norm. Magnetic resonance imaging shows leukoaraiosis in the periventricular area. What is the most likely diagnosis?

**a. Hypoxic-ischemic encephalopathy**

- b. Binswanger's disease (subcortical arteriosclerotic encephalopathy)
- c. Lacunar cerebral stroke



- d. Transient ischemic attacks
- e. Alzheimer's disease

1041. A 60-year-old woman complains of pain in the interphalangeal joints of her hands that exacerbates during work. Objectively, the distal and proximal joints of her fingers II-IV are deformed, painful, have Heberden and Bouchard nodes, and their mobility is limited. X-ray of the joints shows narrowed joint spaces, marginal osteophytes, and subchondral sclerosis. Make the diagnosis:

- a. Osteoarthritis deformans, nodular form
- b. Bekhterev disease (ankylosing spondylitis)
- c. Psoriatic arthritis
- d. Reiter disease (reactive arthritis)
- e. Rheumatic arthritis

1042. Analysis of the population morbidity in a village, located near a chemical factory, shows that within the last several years the number of gout and esophageal cancer cases has significantly increased. What pollutant of the environment is the likely cause of such dynamics?

- a. Mercury
- b. Manganese
- c. Strontium
- d. Molybdenum
- e. Nickel

1043. 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 changes. What pathology does this child have?

- a. Paroxysmal atrial tachycardia
- b. Atrial hypertrophy
- c. WPW syndrome
- d. Extrasystole
- e. Ventricular hypertrophy

1044. When performing a comprehensive assessment of the microclimate at the premises, it is necessary to measure the radiant temperature. What instrument must be used for this purpose?

- a. Catathermometer
- b. Thermograph
- c. Black ball thermometer
- d. Mercury thermometer
- e. Alcohol thermometer