

Krok 2 – Pediatrics Base

1. An 8 year old child has low-grade fever, arthritis, colicky abdominal pain and a purpuric rash localized on the lower extremities. Laboratory studies reveal a guaiac-positive stool, urinalysis with red blood cell (RBC) casts and mild proteinuria, and a normal platelet count. The most likely diagnosis is:

A. Henoch-Schonleins vasculitis
B. Rocky Mountain spotted fever
C. Systemic lupus erythematosus (SLE)
D. Idiopathic thrombocytopenic purpura
E. Poststreptococcal glomerulonephritis

2. A young man has painful indurations in the peripapillary regions of both mammary glands. The most reasonable action will be:

A. To leave these indurations untouched
B. To administer steroids locally
C. To cut and drain them
D. To remove them
E. To take an aspirate for bacterial inoculation and cytology

3. A 9 year old girl with a history of intermittent wheezing for several years is brought to the pediatrician. The child has been taking no medications for some time. Physical examination reveals agitation and perioral cyanosis. Intercostal and suprasternal retractions are present. The breath sounds are quiet, and wheezing is audible bilaterally. The child is admitted to the hospital. Appropriate interventions might include all of the following EXCEPT:

A. Prescribe nebulized cromolyn sodium
B. Prescribe intravenous corticosteroids
C. Prescribe nebulized metaproterenol
D. Prescribe intravenous aminophylline
E. Administer supplemental oxygen

4. Routine examination of a child with a history of bronchial asthma reveals AP of 140/90 mm Hg. The most likely cause of the hypertension is:

A. Renal disease
B. Chronic lung disease
C. Theophylline overdose
D. Coarctation of the aorta
E. Obesity

5. Patient with thyreotoxicosis is in the 2 beds hospital ward of therapeutic department. The area of the ward is 18 m², height 3 m, ventilation rate 2,5/hr. Air temperature - 20°C, relative humidity - 45%, air movement velocity - 0,3 m/s, light coefficient - 1/5, noise level - 30 dB. Do hygienic evaluation of the conditions meet the standards?

A. Discomfortable microclimate

- B. Poor lighting
- C. Non-effective ventilation
- D. High level of noise
- E. All conditions meet the requirements

6. The child is 11 m.o. He suffers from nervous-arthritic diathesis. The increased synthesis of what acid is pathogenic at nervous-arthritic diathesis?

A. Uric acid

- B. Phosphoric acid
- C. Sulfuric acid
- D. Hydrochloric acid
- E. Acetic acid

7. A 10-year-old child complains of fever (temperature is 39°C), frequent painful urination [pollakiuria]. Urine test: proteinuria [0,066 g/L], leukocyturia [entirely within eyeshot], bacteriuria [10⁵ colony forming units/mL]. What is the most probable diagnosis?

A. Acute pyelonephritis

- B. Acute glomerulonephritis
- C. Acute cystitis
- D. Urolithiasis
- E. Dysmetabolic nephropathy

8. A 8-year-old boy has suffered from tonsillitis. In 2 weeks he started complaining of migratory joint pain, edema of joints, restriction of movements, fever. On examination, an acute rheumatic heart disease, activity of the III-rd degree, primary rheumocarditis, polyarthrititis; acute course of disease, cardiovascular failure IIA. What medication is to be prescribed?

A. Prednisone

- B. Cefazolin
- C. Diprazinum
- D. Erythromycin
- E. Delagil

9. The 10 y.o. boy has complains on headache, weakness, fever 40°C, vomiting, expressed dyspnea, pale skin with flush on right cheek, lag of right hemithorax respiratory movement, dullness on percussion over low lobe of right lung,

weakness of vesicular respiration in this zone. The abdomen is painless and soft at palpation. Which disease lead to these symptoms and signs?

A. Pneumonia croupousa

- B. Acute cholecystitis
- C. Flu
- D. Intestinal infection
- E. Acute appendicitis

10. A patient with acute respiratory viral infection (3rd day of disease) complains of pain in lumbar region, nausea, dysuria, oliguria. Urinalysis - hematuria (100-200 RBC in eyeshot spot), specific gravity - 1002. The blood creatinin level is 0,18 millimole/l, potassium level - 6,4 millimole/l. Make the diagnosis:

A. Acute interstitial nephritis

- B. Acute glomerylonephritis
- C. Acute renal failure
- D. Acute cystitis
- E. Acute renal colic

11. A neonate was born from the 1st gestation on term. The jaundice was revealed on the 2nd day of life, then it became more acute. The adynamia, vomiting and hepatomegaly were observed. Indirect bilirubin level was 275 $\mu\text{mol/L}$, direct bilirubin level – 5 $\mu\text{mol/L}$, Hb- 150 g/l. Mothers blood group - O(I), Rh+, childs blood group - A(II), Rh+. What is the most probable diagnosis?

A. Hemolytic disease of the neonate (Rh incompatibility), icteric type

- B. Physiological jaundice
- C. Hemolytic disease of the neonate (Rh - incompatibility)
- D. Jaundice due to conjugation disorder
- E. Hepatitis

12. A baby boy was born in time, it was his mothers 1st pregnancy. The jaundice was revealed on the 2nd day of life, then it progressed. The adynamia, vomiting and hepatomegaly were presented. The indirect bilirubin level was 275 $\mu\text{mol/L}$, the direct bilirubin level - 5 $\mu\text{mol/L}$, Hb- 150 g/L. Mothers blood group - O(I), Rh+, childs blood group - A(II), Rh+. Make a diagnosis.

A. Hemolytic disease of newborn (Rh incompatibility), icteric type

- B. Hemolytic disease of newborn (Rh - incompatibility)
- C. Hepatitis
- D. Jaundice due to conjugation disorder
- E. Physiological jaundice

13. A 3 month old infant suffering from acute segmental pneumonia has dyspnea (respiration rate - 80 per minute), paradoxical breathing, tachycardia, total

cyanosis. Respiration and pulse - ratio is 1:2. The heart dullness under normal size. Such signs characterise:

A. Respiratory failure of III degree

B. Respiratory failure of I degree

C. Myocarditis

D. Congenital heart malformation

E. Respiratory failure of II degree

14. The 7 m.o. infant is suffering from acute pneumonia which was complicated by cardiovascular insufficiency and respiratory failure of II degree. The accompanied diagnosis is malnutrition of II degree. Choose the best variant of therapy:

A. Ampiox and Amicacin

B. Gentamycin and Macropen

C. Ampiox and Polymixin

D. Macropen and Penicillin

E. Penicillin and Ampiox

15. A 3 year old child has been suffering from fever, cough, coryza, conjunctivitis for 4 days. He has been taking sulfadimethoxine. Today it has fever up to 39°C and maculopapular rash on its face. Except of rash the child's skin has no changes. What is your diagnosis?

A. Measles

B. Pseudotuberculosis

C. Rubella

D. Allergic rash

E. Scarlet fever

16. A 2 year old girl has been ill for 3 days. Today she has low grade fever, severe catarrhal presentations, slight maculopapular rash on her buttocks and enlarged occipital lymph nodes. What is your diagnosis?

A. Rubella

B. Scarlet fever

C. Adenoviral infection

D. Pseudotuberculosis

E. Measles

17. A 3 year old boy fell ill abruptly: fever up to 39°C, weakness, vomiting. Haemorrhagic rash of various size appeared on his lower limbs within 5 hours. Meningococemia with infective - toxic shock of the 1 degree was diagnosed. What medications should be administered?

A. Chloramphenicol succinate and prednisone

B. Penicillin and immunoglobulin

- C. Ampicillin and immunoglobulin
- D. Chloramphenicol succinate and interferon
- E. Penicillin and prednisone

18. A 7 year old girl has mild form of varicella. Headache, weakness, vertigo, tremor of her limbs, ataxia, then mental confusion appeared on the 5th day of illness. Meningeal signs are negative. Cerebrospinal fluid examination is normal. How can you explain these signs?

- A. **Encephalitis**
- B. Meningitis
- C. Myelitis
- D. Neurotoxic syndrome
- E. Meningoencephalitis

19. A 7 y.o. girl fell ill abruptly: fever, headache, severe sore throat, vomiting. Minute bright red rash appear in her reddened skin in 3 hours. It is more intensive in axillae and groin. Mucous membrane of oropharynx is hyperemic. Greyish patches is on the tonsils. Submaxillary lymph nodes are enlarged and painful. What is your diagnosis?

- A. **Scarlet fever**
- B. Rubella
- C. Measles
- D. Pseudotuberculosis
- E. Enteroviral infection

20. An 8-year-old boy fell ill acutely: he presents with fever, weakness, headache, abdominal pain, recurrent vomiting, then diarrhea and tenesmus. Stools occur 12 times daily, are scanty, contain a lot of mucus, pus, streaks of blood. His sigmoid gut is tender and hardened. What is your diagnosis?

- A. **Dysentery**
- B. Cholera
- C. Escherichiosis
- D. Staphylococcal gastroenteritis
- E. Salmonellosis

21. The child has complains of the "night" and "hungry" abdominal pains. At fibroscopy in area a bulbus of duodenum the ulcerative defect of 4 mm diameter is found, the floor is obstructed with a fibrin, (H.p +). Administer the optimum schemes of treatment:

- A. **Omeprazole - Trichopolium - Claritromicin**
- B. Maalox - Ranitidin
- C. De-nol
- D. Vicalinum - Ranitidin

E. Trichopolum

22. A woman delivered a child. It was her fifth pregnancy but the first delivery. Mothers blood group is A(II)Rh-, newborns - A(II)Rh+. The level of indirect bilirubin in umbilical blood was 58 micromole/l, haemoglobin - 140 g/l, RBC- $3,8 \times 10^{12}/l$. In 2 hours the level of indirect bilirubin turned 82 micromole/l. The hemolytic disease of newborn (icteric-anemic type, Rh-incompatibility) was diagnosed. Choose the therapeutic tactics:

A. Replacement blood transfusion (conservative therapy)

B. Blood transfusion (conservative therapy)

C. Conservative therapy

D. Symptomatic therapy

E. Antibiotics

23. A mother with an infant visited the pediatrician for expertise advice. Her baby was born with body weight 3,2 kg and body length 50 cm. He is 1 year old now. How many teeth the baby should have?

A. 8

B. 12

C. 10

D. 20

E. 6

24. A mother consulted a pediatrician about her son. Her son was born with body mass of 3 kg and length of 48 cm. He is 1 year old now. What is the required normal mass?

A. 10,5 kg

B. 9,0 kg

C. 12,0 kg

D. 15,0 kg

E. 11,0 kg

25. 6 m.o. infant was born with bodys mass 3 kg and length 50 cm. He is given natural feeding. How many times per day the infant should be fed?

A. 5

B. 4

C. 6

D. 7

E. 8

26. Infant is 6,5 months now and is given natural feeding since birth. Body mass was 3,5 kg, with length 52 cm at birth. How many times per day the supplement (up feeding) should be given?

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

27. A 2 month old healthy infant with good appetite is given artificial feeding since he turned 1 month old. When is it recommended to start the corrective feeding (fruit juice)?

- A. **4,0 months**
- B. 2,0 months
- C. 1,5 months
- D. 3,0 months
- E. 1,0 months

28. An infant was born with body mass 3 kg and body length 50 cm. Now he is 3 years old. His brother is 7 years old, suffers from rheumatic fever. Mother asked the doctor for a cardiac check up of the 3-year-old son. Where is the left relative heart border located?

- A. **1 cm left from the left medioclavicular line**
- B. 1 cm right from the left medioclavicular line
- C. 1 cm left from the left parasternal line
- D. 1 cm right from the left parasternal line
- E. Along the left medioclavicular line

29. A boy of 7 y.o. had an attack of asthma and distant whistling rales after playing with a dog. In the medical history: atopic dermatitis caused by eating eggs, chicken, beef. What group of allergens is the reason of the development of bronchial asthma attacks?

- A. **Epidermal**
- B. Chemical
- C. Pollen
- D. Dust
- E. Itch mite

30. A 14-year-old boy has rheumatism. Over the last 2 years he has had 3 rheumatic attacks. What course of rheumatism does the patient have?

- A. **Prolonged**
- B. Subacute
- C. Persistent-recurrent

- D. Latent
- E. Acute

31. The patient with acquired heart failure has diastolic pressure of 0 mm Hg. What heart failure does the child have?

- A. **Aortal insufficiency**
- B. Aortal stenosis
- C. Mitral stenosis
- D. Mitral insufficiency
- E. Rheumatism

32. A 12 year old child has the ulcer disease of stomach. What is the etiology of this disease?

- A. **Intestinal bacillus**
- B. Influenza
- C. Salmonella
- D. Helicobacter pylori
- E. Lambliosis

33. A nine year old child is at a hospital with acute glomerulonephritis. Clinical and laboratory examinations show acute condition. What nutrients must not be limited during the acute period of glomerulonephritis?

- A. **Carbohydrates**
- B. Liquid
- C. Fats
- D. Proteins
- E. Salt

34. An 18-month-old child was taken to a hospital on the 4-th day of the disease. The disease began acutely with temperature 39, weakness, cough, breathlessness. He is pale, cyanotic, has had febrile temperature for over 3 days. There are crepitative fine bubbling rales on auscultation. Percussion sound is shortened in the right infrascapular region. X-ray picture shows non-homogeneous segment infiltration 8-10 mm on the right, the intensification of lung pattern. Your diagnosis:

- A. **Segmentary pneumonia**
- B. Bronchiolitis
- C. Interstitial pneumonia
- D. Grippe
- E. Bronchitis

35. A 9-year-old girl has attacks of abdominal pain after fried food. No fever. She has pain in Cera point. The liver is not enlarged. Portion B [duodenal probe] - 50 ml. What is your diagnosis?

- A. **Biliary tracts dyskinesia, hypotonic type**
- B. Hepatocirrhosis
- C. Chronic duodenum
- D. Peptic ulcer
- E. Acute colitis

36. A baby was born at 36 weeks of gestation. Delivery was normal, by natural way. The baby has a large cephalohematoma. The results of blood count are: Hb- 120g/l, Er- $3,5 \times 10^{12}/l$, total serum bilirubin - 123 mmol/l, direct bilirubin - 11 mmol/l, indirect - 112 mmol/l. What are causes of hyperbilirubinemia in this case?

- A. **Erythrocyte hemolysis**
- B. Mechanical obstruction of the bile outflow
- C. Disturbance of the conjugative function of liver
- D. Intravascular hemolysis
- E. Bile condensing

37. A 4-month-old girl with blond hair and blue eyes has "mousy" odor of sweat and urine, delayed psychomotoric development. The most typical laboratory data for this disorder is:

- A. **Positive urine ferric chloride test**
- B. High level of oxyproline in urine
- C. High concentration of chlorides in sweat
- D. Low level of thyroid gland hormones in blood
- E. High level of glycosaminoglycanes in urine

38. A neonate is 5 days old. What vaccination dose of BCG vaccine (in mg) is necessary for vaccination of this child?

- A. **0,05 mg**
- B. 0,075 mg
- C. 0,2 mg
- D. 0,1 mg
- E. 0,025 mg

39. 7 y.o. boy with chronic sinusitis and recurrent pulmonary infections has chest X-ray demonstrating a right-sided cardiac silhouette. What is the most likely diagnosis?

- A. **Kartagener syndrome**
- B. Bronchiolitis obliterans
- C. Cystic fibrosis (mucoviscidosis)

- D. Laryngotracheomalacia
- E. alpha-antitrypsin deficiency

40. A 2,9-kg term male infant is born to a mother who developed polyhydramnios at 34 weeks gestation. At birth, the Apgar scores were 9 and 9. The infant develops choking and cyanosis with the first feed. In addition, is unable to place a nasogastric tube. What is the most likely diagnosis?

- A. **Esophageal atresia**
- B. Laryngomalacia
- C. Respiratory distress syndrome
- D. Tracheal atresia
- E. Choanal atresia

41. Full term newborn has developed jaundice at 10 hours of age. Hemolytic disease of newborn due to Rh-incompatibility was diagnosed. 2 hours later the infant has indirect serum bilirubin level increasing up to 14 mmol/L. What is most appropriate for treatment of hyperbilirubinemia in this infant?

- A. **Exchange blood transfusion**
- B. Infusion therapy
- C. Phenobarbital
- D. Phototherapy
- E. Intestinal sorbents

42. A 4 year old girl was playing with her toys and suddenly she got an attack of cough, dyspnea. Objectively: respiration rate - 45/min, heart rate - 130/min. Percussion revealed dullness of percutory sound on the right in the lower parts. Auscultation revealed diminished breath sounds with bronchial resonance on the right. X-ray picture showed shadowing of the lower part of lungs on the right. Blood analysis revealed no signs of inflammation. The child was diagnosed with foreign body in the right bronchus. What complication caused such clinical presentations?

- A. **Atelectasis**
- B. Emphysema
- C. Bronchitis
- D. Pneumonia
- E. Pneumothorax

43. A man, 42 years old, died in a road accident after the hemorrhage on the spot, because of acute hemorrhagic anemia. What minimum percent of the whole blood volume could result in death by acute hemorrhage?

- A. **25-30%**
- B. 10-14%
- C. 35-50%

- D. 15-20%
- E. 6-9%

44. A 6 week old child is admitted because of tachypnea. Birth had been uneventful, although conjunctivitis developed on the third day of life and lasted for about 2 weeks. Physical examination reveals tachypnea, bilateral inspiratory crackles and single expiratory wheezing. Bilateral pneumonia is evident on chest X-ray. The child is afebrile and has no history of fever. White blood cell count is $15 \times 10^9/l$, with 28% of eosinophils. The most likely cause of this child's symptoms is:

- A. **Clamidia trachomatis**
- B. Varicella
- C. Mycoplasma pneumoniae
- D. Pneumocystis carinii
- E. Visceral larva migrans

45. A 6 y.o. asthmatic child was taken to the emergency hospital because of severe coughing and wheezing for the last 24 hours. Physical examination reveals that the child is excitable, has intercostal and suprasternal retractions, expiratory wheezing throughout all lung fields, RR- 60/min. Initial treatment may include the prescription of:

- A. **Subcutaneous epinephrine**
- B. Parenteral phenobarbital
- C. N-acetyl cysteine and cromolyn by inhalation
- D. Parenteral gentamicin
- E. Intravenous fluids in the first 2 h to compensate water deficiency

46. A full term infant was born after a normal pregnancy, delivery, however, was complicated by marginal placental detachment. At 12 hours of age the child, although appearing to be in good health, passes a bloody meconium stool. For determining the cause of the bleeding, which of the following diagnostic procedures should be performed first?

- A. **Barium enema**
- B. An upper gastrointestinal series
- C. Platelet count, prothrombin time, and partial thromboplastin time
- D. An Apt test
- E. Gastric lavage with normal saline

47. In the 43rd week of gestation a long, thin infant was delivered. He is apneic, limp, pale, and covered with "pea soup" amniotic fluid. The first step in the resuscitation of this infant at delivery should be:

- A. **Suction of the trachea under direct vision**
- B. Artificial ventilation with endotracheal tube

- C. Catheterization of the umbilical vein
- D. Administration of 100% oxygen by mask
- E. Artificial ventilation with bag and mask

48. A newborn infant has mild cyanosis, diaphoresis, poor peripheral pulse, hepatomegaly and cardiomegaly. Respiratory rate is 60 breaths per minute, and heart rate is 230 beats per minute. The child most likely has congestive heart failure caused by:

- A. **Paroxysmal atrial tachycardia**
- B. A large atrial septal defect and valvular pulmonary stenosis
- C. Atrial flutter and partial atrioventricular block
- D. A ventricular septal defect and transposition of the great vessels
- E. Hypoplastic left heart syndrome

49. A 6-year-old boy was brought to the emergency room with a 3-hour history of fever up to 39.5°C and sore throat. The child looks alert, anxious and has a mild inspiratory stridor. You should immediately:

- A. **Prepare to establish an airway**
- B. Admit the child and place him in a mist tent
- C. Order a chest x-ray and lateral view of the neck
- D. Obtain an arterial blood gas and start an IV line
- E. Examine the throat and obtain a culture

50. A 7 d.o. boy is admitted to the hospital for evaluation of vomiting and dehydration. Physical examination is otherwise normal except for minimal hyperpigmentation of the nipples. Serum sodium and potassium concentrations are 120 meq/L and 9 meq/L respectively. The most likely diagnosis is:

- A. **Congenital adrenal hyperplasia**
- B. Pyloric stenosis
- C. Panhypopituitarism
- D. Hyperaldosteronism
- E. Secondary hypothyroidism

51. A 7 y.o. boy has crampy abdominal pain and a rash on the back of his legs and buttocks as well as on the extensor surfaces of his forearms. Laboratory analysis reveals proteinuria and microhematuria. He is most likely to be affected by:

- A. **Anaphylactoid purpura**
- B. Polyarteritis nodosa
- C. Dermatomyositis
- D. Systemic lupus erythematosus
- E. Poststreptococcal glomerulonephritis

52. A 5-year-old boy was progressively getting worse compared to the previous 2 months. A chest x-ray has shown right middle lobe collapse. A tuberculin skin test was strongly positive. What is the most characteristic finding in primary tuberculosis?

A. Hilar or paratracheal lymph node enlargement

B. Cavity formation

C. Hematogenous dissemination leading to extrapulmonary tuberculosis

D. Miliary tuberculosis

E. Atelectasis with obstructive pneumonia

53. A girl is 12-year-old. Yesterday she was overcooled. Now she is complaining on pain in suprapubic area, frequent painful urination by small portions, temperature is 37,8°C. Pasternatsky symptom is negative. Urine analysis: protein - 0,033 g/L, WBC- 20-25 in f/vis, RBC- 1-2 in f/vis. What diagnosis is the most probable?

A. Acute cystitis

B. Dysmetabolic nephropathy

C. Acute pyelonephritis

D. Urolithiasis

E. Acute glomerulonephritis

54. The girl of 11 y.o. She is ill for 1 month. She has "butterfly"-type rash on face (spots and papules), pain and swelling of small joints on arms and legs, signs of stomatitis (small-sized ulcers in mouth). CBC: Hb- 80 g/L, RBC- $2,9 \times 10^{12}/L$, WBC- $15 \times 10^9/L$, ESR- 40 mm/hour. Urinalysis: protein- 0,33 g/L. What is the most probable diagnosis?

A. Systemic lupus erythematosus

B. Periarteriitis nodosa

C. Juvenile rheumatoid arthritis, systemic type

D. Acute rheumatic fever

E. Dermatomyositis

55. An infant aged 1 year on the third day of common cold at night developed inspiratory stridor, hoarse voice and barking cough. Physical examination revealed suprasternal and intercostal chest retractions. There is a bluish skin discoloration mostly seen over the upper lip. The respiratory rate is 52 per min and pulse- 122 bpm. The body temperature is 37,5°C. What disease does the infant have?

A. Acute infectious croup due to viral laryngotracheitis

B. Acute bronchiolitis with respiratory distress

C. Acute epiglottitis

D. Acute laryngitis

E. Bronchopneumonia without complications

56. A newborn aged 3 days with hyperbilirubinemia (428 $\mu\text{mol/L}$) developed following disorders. From beginning there were severe jaundice with poor suckling, hypotonia and hypodynamia. Little bit later periodical excitation, neonatal convulsions and neonatal primitive reflexes loss are noted. Now physical examination reveals convergent squint, rotatory nystagmus and setting sun eye sign. How to explain this condition?

A. Encephalopathy due to hyperbilirubinemia

- B. Spastic cerebral palsy
- C. Brain tumour
- D. Skull injury
- E. Hydrocephalus

57. A child is 2 years old. The child complains of hoarse voice, dyspnea with obstructed inspiration. The disease started 3 days ago from dry cough and nose stuffiness. Objectively: general condition is unbalanced, stridor is present. The child's skin is pale. Body temperature is $37,7^{\circ}\text{C}$. The palatine arches are hyperemic. There is no deposit. Heart sounds are rhythmic. Auscultation of lungs reveals rough breathing sounds, crepitation is absent. Parainfluenza virus has been detected in nasopharynx lavage. What is the most likely diagnosis?

A. Acute laryngotracheitis

- B. Foreign body
- C. Epiglottitis
- D. Diphtheria
- E. Laryngospasm

58. A 3-year-old child has been admitted to a hospital because of ostealgia and body temperature rise up to 39°C . Objectively: the patient is in grave condition, unable to stand for ostealgia, there is apparent intoxication, lymph nodes are enlarged up to 1,5 cm. Liver can be palpated 3 cm below the costal margin, spleen - 2 cm below the costal margin. In blood: RBCs - $3,0 \times 10^{12}/\text{l}$, Hb - 87 g/l, colour index - 0,9, thrombocytes - $190 \times 10^9/\text{l}$, WBCs - $3,2 \times 10^9/\text{l}$, eosinophils - 1, stab neutrophils - 1, segmented neutrophils - 0, lymphocytes - 87, monocytes - 2, ESR - 36 mm/h. What examination should be conducted in order to specify the diagnosis?

A. Sternal puncture

- B. Computer tomography
- C. Lymph node puncture
- D. Ultrasound
- E. Lymph node biopsy

59. Apgar test done on a newborn girl at 1st and 5th minute after birth gave the result of 7-8 scores. During the delivery there was a short-term difficulty with extraction of shoulder girdle. After birth the child had the proximal extremity dysfunction and the arm couldnt be raised from the side. The shoulder was turned inwards, the elbow was flexed, there was also forearm pronation, obstetric palsy of brachial plexus. What is the clinical diagnosis?

- A. **Duchenne-Erb palsy**
- B. Trauma of right hand soft tissues
- C. Right hand osteomyelitis
- D. Trauma of thoracic spine
- E. Intracranial haemorrhage

60. Examination of a 9-month-old girl revealed skin pallor, cyanosis during excitement. Percussion revealed transverse dilatation of cardiac borders. Auscultation revealed continuous systolic murmur to the left of the breastbone in the 3-4 intercostal space. This murmur is conducted above the whole cardiac region to the back. What congenital cardiac pathology can be suspected?

- A. **Defect of interventricular septum**
- B. Pulmonary artery stenosis
- C. Coarctation of aorta
- D. Defect of interatrial septum
- E. Fallots tetrad

61. A worker was temporarily off work because of illness for 16 days, was under out-patient treatment. The doctor in charge issued a sick-list first for 5 days, then prolonged it for 10 days. Who can further prolong the sick-list of this patient?

- A. **The doctor in charge of the case together with the head of department**
- B. The doctor in charge of the case with the permission of the head of department
- C. The head of department
- D. Deputy head physician on the working ability expertise
- E. Working ability expertise committee

62. A 13 y.o. patient was treated in dermatological hospital for atopic dermatitis exacerbation. He was discharged in the condition of clinical remission. What recommendations should the doctor give to prevent exacerbations?

- A. **Use of neutral creams to protect skin**
- B. Frequent skin washing with detergents
- C. Systematic skin disinfection
- D. Avoidance of skin insolation
- E. Systematic use of local corticosteroids

63. On the 21 day after appearance of vesiculous chickenpox rash a 7-year-old child developed ataxia, nystagmus, intention tremor, muscle hypotonia. Liquor analysis shows a low-grade lymphocytic pleocytosis, slightly increased protein rate. What complication is it?

- A. **Encephalitis**
- B. Purulent meningitis
- C. Acute nephritis
- D. Postherpetic neuralgia
- E. Pneumonitis

64. An 8-year-old boy suffering from haemophilia was undergoing transfusion of packed red cells. Suddenly he felt pain behind the breastbone and in the lumbar area, dyspnea, cold sweat. Objectively: pale skin, heart rate - 100/min, AP - 60/40 mm Hg; oliguria, brown urine. For the treatment of this complication the following drug should be administered:

- A. **Prednisolone**
- B. Adrenaline
- C. Analgin
- D. Aminophylline
- E. Lasix

65. A 3-year-old child has been diagnosed with type I diabetes mellitus, hyperosmolar coma. The laboratory confirmed the diagnosis. Which laboratory findings are characteristic for such condition?

- A. **High hyperglycemia without ketonemia**
- B. Hyperglycemia and glucosuria
- C. Hyperglycemia and high indicators of acid-base balance
- D. Hyperglycemia and ketonuria
- E. Hyperglycemia and ketonemia

66. A 3-year-old child was playing in a playpen when he suddenly developed paroxysmal cough and shortness of breath. Objectively: dry cough, mixed dyspnea. Lung auscultation revealed some wheezes. Breathing sounds on the right are diminished. The child doesn't mix with other children. Immunization is age-appropriate. What pathological condition can be suspected?

- A. **Foreign body in the respiratory tracts**
- B. Pneumonia
- C. Pertussis
- D. Bronchial asthma
- E. Acute respiratory viral infection

67. A 10-year-old child has been followed-up for the dilated cardiomyopathy. The child presents with dyspnea, cardialgia. There are dense, nonmobile edemata on the lower extremities and sacrum. Ps- 120/min. The cardiac borders are extended transversely. Heart sounds are muffled, there is blowing systolic murmur at the apex and over the xiphoid process. Liver is 3 cm enlarged, urine output is reduced. The blood total protein - 58.6 g/l. In urine: protein - 0,025 g/l, WBCs - 2-4 in the field of vision, RBCs - 2-3 in the field of vision. What is the main mechanism of edema syndrome development:

- A. **Venous congestion of greater circulation**
- B. Secondary nephropathy development
- C. Hypoproteinemia
- D. Venous congestion of lesser circulation
- E. Peripheral circulation disorder

68. After objective clinical examination a 12 year old child was diagnosed with mitral valve prolapse. What complementary instrumental method of examination should be applied for the diagnosis confirmation?

- A. **Echocardiography**
- B. Phonocardiography
- C. Veloergometry
- D. ECG
- E. Roentgenography of chest

69. A full-term child survived antenatal and intranatal hypoxia, it was born in asphyxia (2-5 points on Apgar score). After birth the child has progressing excitability, there are also vomiting, nystagmus, spasms, strabismus, spontaneous Moros and Babinskys reflexes. What localization of intracranial hemorrhage is the most probable?

- A. **Subarachnoid hemorrhage**
- B. Subdural hemorrhage
- C. Hemorrhages into the brain ventricles
- D. Periventricular hemorrhages
- E. Small cerebral tissue hemorrhages

70. A 15 y.o. boy was twice attacked by bees, as a result he had severe anaphylactic shock. What is the most effective prophylaxis method?

- A. **Desensibilisation by means of bee venom extract**
- B. Prescription of corticosteroids for summer
- C. Limitation of outside staying during summer months
- D. Protective clothing
- E. Long-term prophylactic treatment with antihistamines

71. A 9-year-old boy has been suffering from bronchoectasis since he was 3. Exacerbations occur quite often, 3-4 times a year. Conservative therapy results in short periods of remission. The disease is progressing, the child has physical retardation. The child's skin is pale, acrocyanotic, he has "watch glass" nail deformation. Bronchography revealed saccular bronchiectases of the lower lobe of his right lung. What is the further treatment tactics?

- A. **Surgical treatment**
- B. Sanatorium-and-spa treatment
- C. Tempering of the child's organism
- D. Further conservative therapy
- E. Physiotherapeutic treatment

72. A child with tetralogy of Fallot is most likely to exhibit:

- A. **Increased pressure in the right ventricle**
- B. Normal oxygen tension (PaO₂) in the left ventricle
- C. Increased pulse pressure
- D. Increased pulmonary blood flow
- E. Normal pressure gradient across the pulmonary valve

73. A 2-months-old child after preventive vaccination had a prolonged hemorrhage from the vaccination place and due to those an intramuscular hematoma. During examination of the child a considerable rise of prothrombin consumption and a significant prolongation of the activated partial thromboplastin time were found. What is the most probable diagnosis?

- A. **Hemophilia**
- B. Henoch-Schoenlein disease
- C. Inborn afibrinogenemia
- D. Hemorrhagic disease of the neonate
- E. Werlhofs disease

74. A 10 y.o. boy with hemophilia has signs of acute respiratory viral infection with fever. What of the mentioned antifebrile medications are contraindicated to this patient?

- A. **Acetylsalicylic acid**
- B. Paracetamol
- C. Panadol extra
- D. Analgin
- E. Pipolphen

75. A 7-year-old child is sick for 2 weeks with running nose, was taking nasal drops. The boy suffers with alimentary allergy. He applied to doctor due to suppurative and bloody discharges from nose, maceration of ala nasi and upper lip. Rhinoscopy results: there are whitish-greyish areas at nasal septum.

Mucous membrane of oropharynx is not changed. What is the most probable disease?

- A. **Diphtheria of the nose**
- B. Allergic rhinitis
- C. Sinusitis (maxillar sinus))
- D. Adenovirus
- E. Rhinovirus

76. A 10-year-old boy underwent treatment in cardiological department for rheumatism, I acute attack of rheumatic fever, active phase, II degree. The patient was discharged in satisfactory condition. Which drug should be chosen for prevention of rheumatism recurrence?

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

77. A child is 4 years old, has been ill for 5 days. There are complaints of cough, skin rash, to- 38,2°C, face puffiness, photophobia, conjunctivitis. Objectively: there is bright, maculo-papulous, in some areas confluent rash on the face, neck, upper chest. The pharynx is hyperemic. There are seropurulent discharges from the nose. Auscultation revealed dry rales in lungs. What is the most likely diagnosis?

- A. **Measles**
- B. Adenoviral infection
- C. Rubella
- D. Enterovirus exanthema
- E. Scarlet fever

78. A 10 month old boy has been ill for 5 days after consumption of unboiled milk. Body temperature is 38-39°C, there is vomiting, liquid stool. The child is pale and inert. His tongue is covered with white deposition. Heart sounds are muffled. Abdomen is swollen, there is borborygmus in the region of umbilicus, liver is enlarged by 3 cm. Stool is liquid, dark-green, with admixtures of mucus, 5 times a day. What is the most probable diagnosis?

- A. **Salmonellosis**
- B. Acute shigellosis
- C. Rotaviral infection
- D. Staphylococcal enteric infection
- E. Escherichiosis

79. A 3 year old child with weight deficiency suffers from permanent moist cough. In history there are some pneumonias with obstruction. On examination: distended chest, dullness on percussion over the lower parts of lungs. On auscultation: a great number of different rales. Level of sweat chloride is 80 millimol/l. What is the most probable diagnosis?

A. Mucoviscidosis (cystic fibrosis)

- B. Bronchiectasis
- C. Pulmonary hypoplasia
- D. Bronchial asthma
- E. Recurrent bronchitis

80. A 12 y.o. child with acute glomerulonephritis presented with hypertensive syndrom during first days of the disease. What is the role of angiotensin II in the pathogenesis?

A. Intensifies production and secretion of aldosterone

- B. Increases erythropoietin production
- C. Increases renine level
- D. Increases heart output
- E. Inhibits depressive action of prostaglandins

81. A full-term infant is 3 days old. On the different parts of skin there are erythemas, erosive spots, cracks, areas of epidermis peeling. The infant has scalded skin syndrome. Nikolskys symptom is positive. General condition of the infant is grave. Anxiety, hyperesthesia, febrile temperature are evident. What is the most probable diagnosis?

A. Exfoliative dermatitis

- B. Impetigo neonatorum
- C. Mycotic erythema
- D. Phlegmon of newborn
- E. Fingers pseudofurunculosis

82. District pediatrician examines a healthy carried 1-month-old child. The child is breast-fed. Prophylaxis of what disease will the doctor recommend to do first?

A. Rachitis

- B. Parathyropathy
- C. Hypotrophia
- D. Anemia
- E. Spasmophilia

83. A 7-year-old boy has been managed for a month. Immediately after hospitalization there were apparent edemata, proteinuria - 7,1 g/l, daily urine protein - 4,2 g. Biochemical blood test shows persistent hypoproteinemia

(43,2 g/l), hypercholesterolemia (9,2 millimole/l). The patient is most likely have the following type of glomerulonephritis:

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

84. A 3 y.o. girl has had a temperature rise up to 38°C, rhinitis, dry superficial cough, flabbiness, appetite loss. Palpation didn't reveal any changes over her lungs. Percussion sound has a wooden resonance, auscultation revealed puerile breathing, no rales. In blood: leukopenia, lymphocytosis, increased ESR. What is the most probable diagnosis?

- A. **Acute simple tracheitis**
- B. Recurrent bronchitis, acute condition
- C. Bilateral microfocal pneumonia
- D. Acute simple bronchitis
- E. Acute obstructive bronchitis

85. A 5-year-old girl with the transitory immunodeficiency according to T-system has a clinical picture of a right-sided pneumonia during 2 months. How pneumonia progress can be described?

- A. **Delaying**
- B. Chronic
- C. Recidivating
- D. Wavelike
- E. Acute

86. Mother of a 10-month-old baby reports significant pallor, poor appetite, enlarged abdomen in the baby. As a neonate, the child underwent treatment in the in-patient hospital for jaundice and anemia. Objectively: the skin is pale and jaundiced, teeth are absent, abdomen is enlarged, spleen is palpable. Blood test results: Hb - 90 g/l, RBC - $3,0 \times 10^{12}/l$, color index - 0,9, microspherocytosis, reticulocytosis up to 20%, serum bilirubin - 37 mmol/l, unconjugated bilirubin - 28 mmol/l. What type of anemia has occurred in the patient?

- A. **Hemolytic anemia**
- B. Protein-deficiency anemia
- C. Hereditary elliptocytosis
- D. B12-deficiency anemia
- E. Iron-deficiency anemia

87. A 12 y.o. girl took 2 pills of aspirine and 4 hours later her body temperature raised up to 39-40°C. She complains of general indisposition, dizziness, sudden rash in form of red spots and blisters. Objectively: skin lesions resemble of second-degree burns, here and there with erosive surface or epidermis peeling. Nikolskys symptom is positive. What is the most probable diagnosis?

- A. **Acute epidermal necrosis**
- B. Polymorphous exudative erythema
- C. Duhrings disease
- D. Bullous dermatitis
- E. Pemphigus vulgaris

88. A 5-year-old child had an attack of palpitation with nausea, dizziness, generalized fatigue. On ECG: tachycardia with heartbeat rate of 220/min. Ventricle complexes are deformed and widened. P wave is absent. What medication is to be prescribed to provide first aid?

- A. **Lidocaine**
- B. Novocainamides
- C. Strophantin
- D. Isoptin
- E. Seduxen

89. Examination of a 4 month old child revealed some lemon-yellow squamulae with fatty crusts on the scalp. What is the most probable diagnosis?

- A. **Gneiss**
- B. Pseudofurunculosis
- C. Infantile eczema
- D. Milk crust
- E. Strophulus

90. A lumbar puncture was performed for a newborn suspected of having an intracranial birth injury. Bloody cerebrospinal fluid was obtained. What hemorrhage occurred in this case?

- A. **Subarachnoid**
- B. Supratentorial
- C. Subtentorial
- D. Cephalohematoma
- E. Epidural

91. A neonate from gestation with severe gestosis of the second half was born on the 41st week with 2400 g birth weight and 50 cm long. On physical examination: skin is flaccid, subcutaneous fatty cellular tissue is thin, muscle

hypotonia, new-born period reflexes are decreased. Internal organs are without pathological changes. How would you estimate this child?

A. Term infant with pre-natal growth retardation

- B. Premature infant
- C. Postmature infant
- D. Term infant with normal body weight
- E. Immature infant

92. A child was taken to a hospital with focal changes in the skin folds. The child was anxious during examination, examination revealed dry skin with solitary papulous elements and ill-defined lichenification zones. Skin eruption was accompanied by strong itch. The child usually feels better in summer, his condition is getting worse in winter. The child has been artificially fed since he was 2 months old. He has a history of exudative diathesis. Grandmother by his mother's side has bronchial asthma. What is the most likely diagnosis?

A. Atopic dermatitis

- B. Urticaria
- C. Seborrheal eczema
- D. Contact dermatitis
- E. Strophulus

93. A boy, aged 9, was examined: height - 127 cm (-0,36), weight - 28,2 kg (+0,96), chest circumference - 64,9 cm (+0,66), lung vital capacity - 1520 ml (-0,16). What is the complex assessment of the child's physical development?

A. Harmonious

- B. Apparently disharmonious
- C. Disharmonious
- D. Excessive
- E. Below the average

94. A child is 7 months old. Birth weight was 3450, the child is breastfed. Supplemental feeding was introduced on time. Determine the daily protein requirements for the child:

A. 3,0 g/kg

- B. 2,0 g/kg
- C. 3,5 g/kg
- D. 4,0 g/kg
- E. 2,5 g/kg

95. 2 weeks after recovering from angina an 8-year-old boy developed edemata of face and lower limbs. Objectively: the patient is in grave condition, AP-120/80 mm Hg. Urine is of dark brown colour. Oliguria is present. On urine analysis: relative density - 1,015, protein - 1,2 g/l, RBCs are leached and cover

the whole vision field, granular casts - 1-2 in the vision field, salts are represented by urates (big number). What is the most likely diagnosis?

- A. **Acute glomerulonephritis with nephritic syndrome**
- B. Acute glomerulonephritis with nephrotic syndrome, hematuria and hypertension
- C. Nephrolithiasis
- D. Acute glomerulonephritis with isolated urinary syndrome
- E. Acute glomerulonephritis with nephrotic syndrome

96. A 14 year old child suffers from vegetovascular dystonia of pubertal period. He has got sympathoadrenal attack. What medicine should be used for attack reduction?

- A. **Obsidan**
- B. No-shpa
- C. Aminophylline
- D. Corglicone
- E. Amysyl

97. A child is 9 months old. The patient's body temperature is 36,7°C, the skin is pale, humid, there is pain in leg muscles. There is no extremities mobility, sensitivity is present. The child has been diagnosed with poliomyelitis. The causative agent of this disease relates to the following family:

- A. **Picornavirus**
- B. Adenovirus
- C. Rotavirus
- D. Paramyxovirus
- E. Toxovirus

98. A 4 month old child fell seriously ill: body temperature rose up to 38,5°C, the child became inert and had a single vomiting. 10 hours later there appeared rash over the buttocks and lower limbs in form of petechiae, spots and papules. Some haemorrhagic elements have necrosis in the centre. What is the most probable disease?

- A. **Meningococemia**
- B. Influenza
- C. Rubella
- D. Haemorrhagic vasculitis
- E. Scarlet fever

99. A 5-year-old child had strong headache, vomiting, ataxia, dormancy, discoordination of movements, tremor of the extremities on the 8th day of the disease. It was followed by rise in body temperature, vesicular rash mainly on the skin of the body and the hairy part of the head. At the second wave of

the fever a diagnosis of encephalitis was given. What disease complicated encephalitis in this case?

- A. **Chicken pox**
- B. Herpetic infection
- C. German measles
- D. Measles
- E. Enterovirus infection

100. A 13 year old girl was admitted to the cardiological department because of pain in the muscles and joints. Examination of her face revealed an edematous erythema in form of butterfly in the region of nose bridge and cheeks. What is the most probable diagnosis?

- A. **Systemic lupus erythematosus**
- B. Periarthritis nodosa
- C. Dermatomyositis
- D. Rheumatism
- E. Rheumatoid arthritis

101. A 4 y.o. boy was admitted to the hospital with complaints of dyspnea, rapid fatigability. His anamnesis registers frequent respiratory diseases. On percussion: heart borders are dilated to the left and upwards. On auscultation: amplification of the SII above pulmonary artery, a harsh systolodystolic "machine" murmur is auscultated between the II and the III rib to the left of breast bone, this murmur is conducted to all other points including back. AP is 100/20 mm Hg. What is the most probable diagnosis?

- A. **Opened arterial duct**
- B. Isolated stenosis of pulmonary arterial orifice
- C. Interventricular septal defect
- D. Interatrial septal defect
- E. Valvular aortic stenosis

102. A 12 year old girl complains about abrupt weakness, nausea, dizziness, vision impairment. The day before she ate home-made stockfish, beef. Examination revealed skin pallor, a scratch on the left knee, dryness of mucous membranes of oral pharynx, bilateral ptosis, mydriatic pupils. The girl is unable to read a simple text (mist over the eyes). What therapy would be the most adequate in this case?

- A. **Parenteral introduction of polyvalent antitoxin serum**
- B. Parenteral introduction of antitetanus serum
- C. Parenteral introduction of antibiotics
- D. Parenteral disintoxication
- E. Gastric lavage

103. A child from the first non-complicated pregnancy but complicated labor had cephalhematoma. On the second day there developed jaundice. On the 3th day appeared changes of neurologic status: nystagmus, Graefes sign. Urea is yellow, feces- golden-yellow. Mothers blood group is A(II)Rh-, child- A(II)Rh+. On the third day childs Hb- 200 g/L, RBC- $6,1 \times 10^{12}/L$, bilirubin in blood - 58 mk mol/L due to unconjugated bilirubin, Ht- 0,57. What is the childs jaundice explanation?

A. Brain delivery trauma

- B. Hemolytic disease of newborn
- C. Physiologic jaundice
- D. Bile ducts atresia
- E. Fetal hepatitis

104. A full-term baby (the 1st uncomplicated pregnancy, difficult labour) had a cephalogematoma. On the 2nd day there was jaundice, on the third the following changes in neurological status appeared: nystagmus, Graefe syndrome. Urine was yellow, feces were of golden-yellow colour. Mothers blood group is A(II)Rh-, the babys one - A(II)Rh+. On the third day the childs Hb was 200g/l, RBCs - $6,1 \times 10^{12}/l$, blood bilirubin - 58 micromole/l at the expense of unbound fraction. What caused the jaundice in the child?

A. Craniocerebral birth trauma

- B. Biliary atresia
- C. Fetal hepatitis
- D. Physiological jaundice
- E. Neonatal anaemia

105. After birth a child was pale and had arrhythmical breathing. Oxygen therapy didnt have any effect. Pulse was weak and rapid. It was difficult to measure arterial pressure accurately. There were no edemata. What is the most likely reason for these symptoms?

A. Asphyxia

- B. Congestive heart failure
- C. Intrauterine sepsis
- D. Congenital pneumonia
- E. Intracranial haematoma

106. A child was delivered severely premature. After the birth the child has RI symptoms, anasarca, fine bubbling moist rales over the lower lobe of the right lung. Multiple skin extravasations, bloody foam from the mouth have occurred after the 2 day. On chest X-ray: atelectasis of the lower lobe of the right lung. In blood: Hb-100 g/L, Ht- 0,45. What is the most probable diagnosis?

A. Edematous-hemorrhagic syndrome

- B. Pulmonary edema

- C. Disseminated intravascular clotting syndrome
- D. Hyaline membrane disease
- E. Congenital pneumonia

107. An infant is 2 days old. He was born full-term with signs of intrauterine infection, and therefore receives antibiotics. Neonates should be given antibiotics at longer intervals and lower doses compared to older children and adults because:

- A. Neonates have lower glomerular filtration**
- B. Neonates have a reduced activity of glucuronyl transferase
- C. Neonates have higher hematocrit
- D. Neonates have a decreased blood pH
- E. Neonates have lower concentration of protein and albumin in blood

108. An infant is 2 d.o. It was full-term born with signs of intrauterine infection, that's why it was prescribed antibiotics. Specify, why the gap between antibiotic introductions to the new-born children is longer and dosage is smaller compared to the older children and adults?

- A. The newborns have a lower level of glomerular filtration**
- B. The newborns have reduced activity of glucuronil transferase
- C. The newborns have bigger hematocrit
- D. The newborns have diminished blood pH
- E. The newborns have lower concentration of protein and albumins in blood

109. A 10-year-old child is sick with chronic viral hepatitis B with marked activity of the process. Total bilirubin – 70 $\mu\text{mol/L}$, direct - 26 $\mu\text{mol/L}$, indirect – 44 $\mu\text{mol/L}$. AST - 6,2 mmol/L , ALT - 4,8 mmol/L . What mechanism underlies the transaminase level increase of this patient?

- A. Cytolysis of hepatocytes**
- B. Intrahepatic cholestasis
- C. Failure of bilirubin conjugation
- D. Failure of the synthetical function of the liver
- E. Hypersplenism

110. A 12-year-old girl applied to doctor with complaints of swelling on the front part of the neck. The doctor diagnosed hyperplasia of the thyroid gland of the second degree, euthyroidism. Ultrasound suspected autoimmune thyroiditis. Blood was taken for titre of antibodies to thyroglobulin. What titre of antibodies will be diagnostically important?

- A. 1:100**
- B. 1:250

- C. 1:150
- D. 1:50
- E. 1:200

111. A 14-year-old girl has been presenting with irritability and tearfulness for about a year. A year ago she was also found to have diffuse enlargement of the thyroid gland (II grade). This condition was regarded as a pubertal manifestation, the girl didn't undergo any treatment. The girl's irritability gradually gave place to a complete apathy. The girl got puffy face, soft tissues pastosity, bradycardia, constipations. Skin pallor and gland density progressed, the skin became of a waxen hue. What disease may be suspected?

- A. **Autoimmune thyroiditis**
- B. Subacute thyroiditis
- C. Juvenile basophilism
- D. Diffuse toxic goiter
- E. Thyroid carcinoma

112. In the anamnesis of a 2-year-old girl there are recurrent pneumonias with signs of obstruction. There are heterogeneous moist and dry rales, respiration is weakened. Dense, viscous secretion is difficult to hawk. There are "drumsticks", physical retardation. What is the most probable diagnosis?

- A. **Mucoviscidosis, pulmonary form**
- B. Bronchial asthma
- C. Pulmonary tuberculosis
- D. Congenital pulmonary polycystosis
- E. Recidivating bronchitis

113. On the 3rd day of life a baby presented with haemorrhagic rash, bloody vomit, black stool. Examination revealed anaemia, extended coagulation time, hypoprothrombinemia, normal thrombocyte rate. What is the optimal therapeutic tactics?

- A. **Vitamin K**
- B. Calcium gluconate
- C. Epsilon-aminocaproic acid
- D. Sodium ethamsylate
- E. Fibrinogen

114. A 2 month old full-term child was born with weight 3500 g and was on the mixed feeding. Current weight is 4900 g. Evaluate the current weight of the child:

- A. **Corresponding to the age**
- B. Hypotrophy of the I grade
- C. 150 g less than necessary

- D. Hypotrophy of the II grade
- E. Paratrophy of the I grade

115. A 2 m.o. breast-fed child suffers from cheek skin hyperemia, sporadic papulous elements on the skin of the chest and back following the apple juice introduction. The child is restless. What is the initial pediatrician's tactics?

- A. Clarify mother's diet and exclude obligate allergens**
- B. Apply ointment with corticosteroids to affected skin areas
- C. Administer general ultraviolet irradiation
- D. Refer to prescribe dermatologist
- E. Treat with claritine

116. A 5 month old boy was born prematurely, he didn't suffer from any disease at the infant age and later on. Examination at an outpatient's hospital revealed paleness of skin, sleepiness. Blood count: Hb - 95 g/l, erythrocytes - $3,5 \times 10^{12}/l$, reticulocytes - 9 0/00, colour index - 0,7, osmotic stability of erythrocytes - 0,44-0,33%, serum iron - 4,9 micromole/l. What is the most probable cause of anemia?

- A. Iron deficit**
- B. Hemogenesis immaturity
- C. Erythrocyte hemolysis
- D. B12 deficit
- E. Infectious process

117. A 7 y.o. child had elevation of temperature to 40°C in anamnesis. For the last 3 months he presents fusiform swelling of fingers, ankle joints and knee joint, pain in the upper part of the sternum and cervical part of the spinal column. What is the most probable diagnosis?

- A. Juvenile rheumatic arthritis**
- B. Osteoarthritis
- C. Toxic synovitis
- D. Rheumatism
- E. Septic arthritis

118. An 8 year old girl complains about joint pain, temperature rise up to 38°C , dyspnea. Objectively: the left cardiac border is deviated by 2,5 cm to the left, tachycardia, systolic murmur on the apex and in the V point are present. Blood count: leukocytes - $20 \times 10^9/l$, ESR - 18 mm/h. What sign gives the most substantial proof for rheumatism diagnosis?

- A. Carditis**
- B. Leukocytosis
- C. Arthralgia
- D. Fever

E. Accelerated ESR

119. A 5 y.o. child with stigmas of dysembryogenesis (small chin, thick lips, opened mouth, hyperthelorumism) has systolic murmur in the second intercostal to the right of the sternum. The murmur passes to the neck and along the sternum left edge. The pulse on the left brachial artery is weakened. BP on the right arm is 110/60 mm Hg, on the left - 100/60 mm Hg. ECG results: hypertrophy of the right ventricle. What defect is the most probable?

A. Aortic stenosis

- B. Coarctation of the aorta
- C. Open aortic duct
- D. Defect of interventricular septum
- E. Defect of interatrial septum

120. A 1,5-year-old child fell ill acutely with high temperature 38°C, headache, fatigue. The temperature declined on the fifth day, muscular pain in the right leg occurred in the morning, there were no movements and tendon reflexes, sensitivity was reserved. What is the initial diagnosis?

A. Polyomyelitis

- B. Viral encephalitis
- C. Osteomyelitis
- D. Hip joint arthritis
- E. Polyarthropathy

121. A 3-year-old child has been delivered to a hospital in soporose state with considerable amyotonia, inhibition of tendon and periosteal reflexes. Miosis and asthenocoria are also present. Corneal reflexes are preserved. Pulse is rapid and weak. AP- 80/50 mm Hg. The parents suspect the child of accidental taking some tablets. Such clinical presentations are typical for intoxication with the following tableted drugs:

A. Tranquilizers

- B. Beta-2-adrenoceptor agonists
- C. Antihypertensive drugs
- D. Antropine drugs
- E. Barbiturates

122. A 2 m.o. child with birth weight 5100 g has jaundice, hoarse cry, umbilical hernia, physical development lag. Liver is +2 cm enlarged, spleen is not enlarged. In anamnesis: delayed falling-away of umbilical cord rest. In blood: Hb- 120 g/L, erythrocytes - $4,5 \times 10^{12}/L$, ESR- 3 mm/h. Whole serum bilirubin is 28 $\mu\text{mol}/L$, indirect - 20 $\mu\text{mol}/L$, direct - 8 $\mu\text{mol}/L$. What is the most probable diagnosis?

A. Congenital hypothyreosis

- B. Hemolytic anemia
- C. Cytomegalovirus infection
- D. Conjugated jaundice
- E. Congenital hepatitis

123. A 5-year-old child developed an acute disease starting from body temperature rise up to 38,5°C, running nose, cough and conjunctivitis. On the 4th day the child presented with maculo-papular rash on face. Body temperature rose again up to 39,2°C. Over the next few days the rash spread over the whole body and extremities. Mucous membrane of palate was hyperemic, there was whitish deposition on cheek mucous membrane next to molars. What is your provisional diagnosis?

- A. **Measles**
- B. Acute viral respiratory infection
- C. Enterovirus diseases
- D. Rubella
- E. Yersinia

124. A 3 year old child fell acutely ill, body temperature rose up to 39,5°C, the child became inert, there appeared recurrent vomiting, headache. Examination revealed positive meningeal symptoms, after this lumbar puncture was performed. Spinal fluid is turbid, runs out under pressure, protein concentration is 1,8 g/l; Pandy reaction is +++, sugar concentration is 2,2 millimole/l, chloride concentration - 123 millimole/l, cytosis is 2,35×10⁹ (80% of neutrophils, 20% of lymphocytes). What is the most probable diagnosis?

- A. **Purulent meningitis**
- B. Brain tumour
- C. Serous tuberculous meningitis
- D. Serous viral meningitis
- E. Subarachnoid haemorrhage

125. A 13 y.o. girl complains of having temperature rises up to febrile figures for a month, joint ache, periodical skin rash. Examination revealed steady enhancing of ESR, LE-cells. What is the most probable diagnosis?

- A. **Systematic lupus erythematosus**
- B. Rheumatics
- C. Systematic scleroderma
- D. Juvenile rheumatoid arthritis
- E. Acute lymphoblast leukemia

126. A 7-year-old child was brought to a doctor for a check. The child has a 4-year history of bronchial asthma, asthma attacks occur mainly in spring and

summer. Allergy tests revealed hypersensitivity to poplar seed tufts, field herbs. What recommendation should be given?

A. Specific hyposensitization

- B. Phytotherapy
- C. Needle reflexotherapy
- D. Physiotherapy
- E. Treatment at a health resort

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

A. Acute pneumonia

- B. Acute bronchiolitis
- C. Acute laryngotracheitis
- D. ARVI
- E. Acute bronchitis

128. An 8 y.o. boy complains of constant cough along with discharge of greenish sputum, dyspnea during physical activities. At the age of 1 year and 8 months he fell ill for the first time with bilateral pneumonia that had protracted course. Later on there were recurrences of the disease 5-6 times a year, during the remission periods there was constant productive cough. What examination results will be the most important for making a final diagnosis?

A. Bronchography

- B. Bacterial inoculation of sputum
- C. Roentgenography of thorax organs
- D. Bronchoscopy
- E. Spirography

129. A mother of a 5 y.o. girl consulted a doctor about daughters involuntary urination at night, nightmares, sleep disorders, slow gaining of body weight. Objectively: malnutrition, intellectual development is good, the girl can read and explains common situations quite adultly. Her skin is very pale, liver is enlarged in size. Her mother suffers from cholelithiasis. What type of diathesis is the most probable in the child's case?

A. Gouty diathesis

- B. Lymphohypoplastic diathesis
- C. Exudative diathesis
- D. Urine acid diathesis
- E. Allergic diathesis

130. A 10 year old girl complains about abdominal pain that is arising and getting worse after eating rough or spicy food. She complains also about sour eructation, heartburn, frequent constipations, headache, irritability. She has been suffering from this for 12 months. Objectively: the girls diet is adequate. Tongue is moist with white deposit at the root. Abdomen is soft, painful in its epigastric part. What study method will help to make a diagnosis?

- A. **Esophagogastroduodenoscopy**
- B. Biochemical blood analysis
- C. Fractional examination of gastric juice
- D. Intragastral pH-metry
- E. Contrast roentgenoscopy

131. A 40 h.o. child age has hyperosthesia, CNS depression, dyspepsia. Sepsis is suspected. What should the differential diagnosis be made with?

- A. **Hypoglycemia**
- B. Hypomagnesemia
- C. Hyperbilirubinemia
- D. Hypocalcemia
- E. Hyperkaliemia

132. Examination of a full-term 6-day-old infant revealed that different areas of skin had erythemas, flaccid bubbles, eroded surface, cracks, peeling of the epidermis looking like being scalded with boiling water. There was positive Nikolskys symptom. General condition of the child was serious. The child was restless, hypersensitive, febrile. What is the most likely diagnosis in this case?

- A. **Ritters exfoliative dermatitis**
- B. Neonatal pemphigus
- C. Epidermolysis
- D. Neonatal phlegmon
- E. Fingers pseudofurunculosis

133. A 1,5 y.o. child fell seriously ill: chill, body temperature rise up to 40,1°C, then rapid dropping to 36,2°C, skin is covered with voluminous hemorrhagic rash and purple cyanotic spots. Extremities are cold, face features are sharpened. Diagnosis: meningococcosis, fulminant form, infection-toxic shock. What antibiotic must be used at the pre-admission stage?

- A. **Soluble Levomycetine succinate**
- B. Lincomycin
- C. Penicillin
- D. Gentamycin
- E. Sulfamonometoxin

134. A 10 year old boy suffers from chronic viral hepatitis type B with maximal activity. What laboratory test can give the most precise characteristic of cytolysis degree?

- A. **Transaminase test**
- B. Takata-Ara test
- C. Weltmans coagulation test
- D. Prothrombin test
- E. Test for whole protein

135. A 6 y.o child complains of thirst, polyuria, increased appetite for 2 months with weight loss for 3 kg. There has been nocturnal enuresis during last week. On examination: hyperglycemia 14 mol/L. The diagnosis is diabetes mellitus I type. What is the genesis of this disease?

- A. **Autoimmune**
- B. Neurogenic
- C. Virus-bacterial
- D. Viral
- E. Bacterial

136. A 10 y.o. child who is at oligoanuretic stage of acute renal insufficiency has got sensations of pricking in the mucous membrane of oral cavity and tongue, extremities numbness, reduced reflexes, respiratory disturbance, arrhythmia. What are these symptoms caused by?

- A. **Hyperkaliemia**
- B. Hyperazotemia
- C. Alkalosis
- D. Acidosis
- E. Hyponatremia

137. Examination of a 12 year old child revealed diffuse thyroid enlargement of the II degree. Heart auscultation revealed dullness of heart sounds, heart rate was 64/min. The child has frequent constipations, anemia. Concentration of thyreoglobulin antibodies is increased. What disease might have caused such symptoms?

- A. **Autoimmune thyroiditis**
- B. Thyroid carcinoma
- C. Endemic goiter
- D. Thyroid hyperplasia
- E. Diffuse toxic goiter

138. An 8-year-old girl has been admitted to the cardiology department. Objectively: there is a skin lesion over the extensor surfaces of joints with atrophic cicatrices, depigmentation, symmetrical affection of skeletal muscles (weakness, edema, hypotrophy). What disease are these changes most typical for?

- A. **Dermatomyositis**
- B. Systemic scleroderma
- C. Systemic lupus erythematosus
- D. Reiters disease
- E. Nodular periarteritis

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

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

140. A 12-year-old girl undergoes regular gastroenterological check-ups for duodenal ulcer, biliary dyskinesia. What is the recommended frequency of anti-relapse treatment?

- A. **Twice a year**
- B. Every 3 months
- C. Every two months
- D. Once a year
- E. Three times a year

141. A 13 y.o. teenager who suffers from hemophilia A was taken to the hospital after a fight at school. His diagnosis is right-sided hemarthrosis of knee joint, retroperitoneal hematoma. What should be primarily prescribed?

- A. **Fresh frozen plasma**
- B. Washed thrombocytes
- C. Aminocapronic acid
- D. Placental albumin
- E. Dry plasma

142. A 3 m.o. child fell seriously ill, body temperature rose up to 37,8°C, there is semicough. On the 3-rd day the cough grew worse, dyspnea appeared. On percussion: tympanic sound above lungs, on auscultation: a lot of fine moist and wheezing rales during expiration. What is the most probable diagnosis?

- A. **Acute respiratory viral infection, bronchiolitis**

- B. Acute respiratory viral infection, bronchitis with asthmatic component
- C. Acute respiratory viral infection, focal pneumonia
- D. Acute respiratory viral infection, bronchopneumonia
- E. Acute respiratory viral infection, bronchitis

143. On the 1st day of life a full-term girl (2nd labour) weighing 3500g, with Apgar score of 8 points, presented with jaundice. Indirect bilirubin of blood - was 80 micromole/l, 6 hours later - 160 micromole/l. What is the optimal method of treatment?

A. Exchange blood transfusion

- B. Phototherapy
- C. Phenobarbital treatment
- D. Enterosorbents
- E. Infusion therapy

144. A child was born at a gestational age of 34 weeks in grave condition. The leading symptoms were respiratory distress symptoms, namely sonorous and prolonged expiration, involving additional muscles into respiratory process. The Silverman score at birth was 0 points, in 3 hours it was 3 points with clinical findings. Which diagnostic study will allow to diagnose the form of pneumopathy?

A. X-ray of chest

- B. Determination of blood gas composition
- C. Clinical blood test
- D. Proteinogram
- E. Immunoassay

145. A 10-year-old girl consulted a doctor about thirst, frequent urination, weight loss. She has been observing these symptoms for about a month. Objectively: no pathology of internal organs was revealed. What laboratory analysis should be carried out in the first place?

A. Blood glucose analysis on an empty stomach

- B. Acetone in urine test
- C. Glucose in urine test on the base of daily diuresis
- D. Glucose tolerance test
- E. Glucosuric profile

146. A 6-year-old child complains of frequent liquid stool and vomiting. On the 2nd day of disease the child presented with inertness, temperature rise up to 38,2°C, Ps- 150 bpm, scaphoid abdomen, palpatory painful sigmoid colon, defecation 10 times a day with liquid, scarce stool with mucus and streaks of green. What is a provisional diagnosis?

A. Shigellosis

- B. Escherichiosis
- C. Salmonellosis
- D. Intestinal amebiasis
- E. Yersiniosis

147. A 4-year-old boy had untimely vaccination. He complains of painful swallowing, headache, inertness, fever. Objectively: the child is pale, has enlarged anterior cervical lymph nodes, swollen tonsils with cyanotic hyperemia, tonsils are covered with gray-white pellicles which cannot be easily removed. When the pellicles are forcibly removed, the tonsils bleed. What is the most likely diagnosis?

- A. **Oropharyngeal diphtheria**
- B. Infectious mononucleosis
- C. Follicular tonsillitis
- D. Lacunar tonsillitis
- E. Pseudomembranous tonsillitis

148. After a 10-year-old child had been bitten by a bee, he was delivered to a hospital. There were lip, face and neck edemata. The patient felt hot and short of breath. Objectively: breathing was laboured and noisy. There were foamy discharges from the mouth, cough. The skin was pale and cold. There was bradypnoea. Heart sounds were muffled and arrhythmic. Thready pulse was present. What diagnosis was made by the expert in resuscitation?

- A. **Anaphylactic shock**
- B. Bronchial asthma
- C. Cerebral coma
- D. Acute cardiovascular collapse
- E. Quinckes edema

149. A 13-year-old girl complains of fever up to 37,4°C during the last 2 months after recovering from ARVI. Objectively: malnutrition, diffuse grade II enlargement of the thyroid gland feeling dense on palpation, exophthalmos, tachycardia. What kind of pathological syndrome is it?

- A. **Thyrotoxicosis**
- B. Hypoparathyroidism
- C. Thymomegaly
- D. Hyperparathyroidism
- E. Hypothyroidism

150. A 3-year-old girl presents with pertussis-like cough with thick sputum. There have been persistent changes in lungs since the age of 6 months when she was first diagnosed with acute pneumonia. Chloride concentration in the

perspiration is 112 mEq/l. The child has been diagnosed with mucoviscidosis. What is the basis for autosomal recessive disease - mucoviscidosis?

- A. **Inadequate transport of sodium and chloride ions**
- B. α -1-antitrypsin deficiency
- C. Pulmonary cysts
- D. Pulmonary artery hypoplasia
- E. Deposition of calcium triphosphates and carboxates in the alveoles

151. A newborn has purulent discharges from the umbilical wound, the skin around the navel is swollen. The baby's skin is pale, with a yellow-gray tint, generalized hemorrhagic rash is present. What is the most likely diagnosis?

- A. **Sepsis**
- B. Omphalitis
- C. Hemolytic disease of the newborn
- D. Hemorrhagic disease of the newborn
- E. Thrombocytopenia

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

- A. **Ciprofloxacin**
- B. Azithromycin
- C. Chloramphenicol
- D. Ampicillin
- E. Cefazolin

153. A 14-year-old boy with a history of chronic tonsillitis and sinusitis has developed a feeling of heart irregularities and additional pulse. HR- 83/min. ECG results: regular impulses with no visible P wave that occur every two sinus contractions, QRS complex is dramatically deformed and prolonged to over 0.11 s, T wave is discordant followed by a complete compensatory pause. Specify the arrhythmia type:

- A. **Trigeminal extrasystole**
- B. Left bundle branch block
- C. Partial AV-blockade
- D. Bigeminal extrasystole
- E. Complete AV-block

154. An 8-year-old girl periodically has sudden short-term heart pain, sensation of chest compression, epigastric pain, dizziness, vomiting. Objectively: the patient is pale, respiratory rate - 40/min, jugular pulse is present. Ps- 185 bpm, of poor volume. AP- 75/40 mm Hg. ECG taken during

an attack shows ectopic P waves, QRS wave is not deformed. At the end of an attack a compensatory pause is observed. The most likely cause of the attack is:

- A. **Paroxysmal atrial tachycardia**
- B. Paroxysmal ventricular tachycardia
- C. Atrial fibrillation
- D. Complete AV-block
- E. Sinus tachycardia

155. A 10-year-old child with a history of nonrheumatic carditis has periodic attacks manifested by heart pain, dyspnea, pallor, high blood pressure, a dramatic increase in heart rate up to 180/min. What drug would be most effective to treat this patient?

- A. **Obsidan**
- B. Procainamide
- C. Verapamil
- D. Ajmaline
- E. Lidocaine

156. A 1-month-old child became restless and presented with an increase in head sweating. It is known from the history that the child has been fed with cows milk since birth (September 5). Examination revealed craniotabes. A doctor administered a course of UV radiation. Decide, if the child needs ergocalciferol:

- A. **2-2,5 months after the UVR withdrawal**
- B. In combination with UVR
- C. A month after the UVR withdrawal
- D. Immediately after the UVR withdrawal
- E. Does not need

157. 15 minutes after the second vaccination with DTP vaccine a 4-month-old boy exhibited the symptoms of Quinckes edema. What medication should be given for emergency aid?

- A. **Prednisolone**
- B. Adrenalin
- C. Heparin
- D. Furosemide
- E. Seduxen

158. A baby is 3 months old. The mother consulted a pediatrician about lack of breast milk. After several test weighings it was found that the child had to receive supplementary feeding. What is the optimal milk formula for this child?

A. Malysh

- B. Milk formula No. 3
- C. Malutka
- D. Whole cows milk
- E. Milk formula No. 2

159. Examination of a newborn revealed skin redness that appeared immediately after birth and reached the maximum intensity on the second day of life. What is your provisional diagnosis?

A. Simple erythema

- B. Transient erythema
- C. Toxic erythema
- D. Erythema nodosum
- E. Annular erythema

160. A child is 2 days old. He was born with a weight of 2900 g, body length of 50 cm. On examination the skin is intensely red, elastic, with preserved turgor. Puerile respiration is present. Respiration rate - 40/min, cardiac sounds are rhythmic, sonorous. HR- 138/min. The abdomen is soft. The liver extends 2 cm below the costal margin. Diuresis is sufficient. Stool is in form of meconium. What is the most likely diagnosis?

A. Physiological erythema of the newborn

- B. Neonatal phlegmon
- C. Exfoliative Ritters dermatitis
- D. Erysipelas
- E. Toxic erythema of the newborn

161. A full-term baby was born with body weight of 3200 g, body length of 50 cm, Apgar score - 8-10 points. What is the optimum time for the first breast-feeding?

A. First 30 minutes

- B. First 6 hours
- C. First 48 hours
- D. After 48 hours
- E. First 24 hours

162. A 3-year-old child has been taken to a pediatrician. He has no recent history of any diseases. Objective examination revealed no pathology of the internal organs. The child needs the routine immunization against the following disease:

A. Poliomyelitis

- B. Type B hepatitis
- C. Measles, rubella, parotitis

- D. Diphtheria and tetanus
- E. Pertussis

163. An 11-year-old girl has been immunized according to her age and in compliance with the calendar dates. What vaccinations should the children receive at this age?

- A. **Diphtheria and tetanus**
- B. TB
- C. Hepatitis B
- D. Pertussis
- E. Polio

164. A 6-year-old child has duodenal ulcer. What antibacterial drug should be co-administered together with metronidazole and De-Nol in order to eradicate Helicobacter pylori infection?

- A. **Amoxicillin**
- B. Oleandomycin
- C. Sulfadimethoxinum
- D. Biseptol
- E. Tetracycline

165. A baby born after fast labour has palsy of hand muscles. Grasp reflex is absent, as well as hand-to-mouth reflex. Hand sensitivity is absent. What is the most likely diagnosis?

- A. **Dejerine-Klumpke palsy**
- B. Duchenne-Erbs palsy
- C. Muscle paresis
- D. Bernard-Horner syndrome
- E. Total lesion of the brachial plexus

166. A child is 12 years old. He complains of a dull aching pain in the epigastrium and right hypochondrium, that is getting worse after taking fatty or fried food, headache, weakness, nausea, low-grade fever. Abdominal palpation reveals a marked resistance of muscles in the right hypochondrium, positive Kerrs, Ortner's, Murphy's symptoms. What is the most likely diagnosis?

- A. **Chronic cholecystitis**
- B. Acute gastritis
- C. Acute pancreatitis
- D. Acute appendicitis
- E. Viral hepatitis

167. A 3-month-old girl presents with rhinitis, dyspnea, dry cough. These manifestations have been observed for two days. Objectively: the child has pale skin, acrocyanosis, shallow respiration at the rate of 80/min. Percussion reveals handbox resonance over the whole surface of lungs, massive fine rales. What is the most likely diagnosis?

- A. **Acute bronchiolitis**
- B. Acute bronchitis
- C. Mucoviscidosis
- D. Pneumonia
- E. Foreign body of the airway

168. During the first home visit to a full-term boy after his discharge from the maternity hospital a pediatrician revealed a symmetrical swelling of mammae without skin changes over them, swelling of the scrotum. The body temperature was of 36,5°C. The baby was calm, sucked the mother's breast actively. What condition should you think of?

- A. **Hormonal crisis of the newborn**
- B. Congenital adrenal dysfunction
- C. Sclerema
- D. Neonatal mastitis
- E. Necrotic neonatal phlegmon

169. A full-term neonate weighing 4500 g was born asphyxiated with Apgar score of 4-6 points. During the delivery shoulder dystocia occurred. Neurologic assessment revealed non-focal neurologic symptoms, total flaccid paresis of the upper extremities since the arm was atonic and pronated. Grasping, Babinski and Moro reflexes were absent. What segments of spinal cord had been affected?

- A. **CV - ThI**
- B. CIII - CIV
- C. ThVI - ThV
- D. ThI - ThV
- E. CI - CII

170. A newborn (mother's I pregnancy) weighing 3500 g presents with jaundice, lethargy, reduced reflexes. Objectively: second grade jaundice of skin with saffron tint, liver - +2 cm, spleen - +1 cm. Urine and feces are yellow. Blood count: Hb- 100 g/l, RBCs - $3,2 \times 10^{12}/l$, WBCs - $18,7 \times 10^9/l$, mother's blood type - A(I) Rh(+), baby's blood type - A(II) Rh(-), bilirubin - 170 mmol/l, indirect fraction. ALT, AST rates are normal. What disease is the child most likely to have?

- A. **Hemolytic disease of newborn, ABO-conflict**
- B. Hemolytic disease of newborn, Rh-conflict
- C. Physiologic jaundice

- D. Biliary atresia
- E. Perinatal hepatitis

171. A 10-year-old girl was admitted to a hospital with carditis presentations. It is known from the anamnesis that two weeks ago she had exacerbation of chronic tonsillitis. What is the most likely etiological factor in this case?

- A. **Streptococcus**
- B. Pneumococcus
- C. Staphylococcus
- D. Klebsiella
- E. Proteus

172. All the joints on the left elbow of a newborn are extended, the whole arm hangs vertically along the trunk with the forearm pronated. Active movements in the elbow joint are absent but present in the shoulder joint. The hand is flattened, atrophied, cold to the touch, hangs passively. Grasp reflex and hand-mouth reflex on the affected side are missing. Haemogram values are normal. What is the most likely diagnosis?

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

173. Head circumference of a 1-month-old boy with signs of excitement is 37 cm, prefontanel is 2x2 cm large. After feeding the child regurgitates small portions of milk; stool is normal in respect of its volume and composition. Muscle tonus is within norm. What is the most likely diagnosis?

- A. **Pylorospasm**
- B. Microcephaly
- C. Craniostenosis
- D. Meningitis
- E. Pylorostenosis

174. 10 days after birth, a newborn developed a sudden fever up to 38,1°C. Objectively: the skin in the region of navel, abdomen and chest is erythematous; there are multiple pea-sized blisters with no infiltration at the base; single bright red moist erosions with epidermal fragments on the periphery. What is your provisional diagnosis?

- A. **Epidemic pemphigus of newborn**
- B. Streptococcal impetigo
- C. Atopic dermatitis

- D. Vulgar impetigo
- E. Syphilitic pemphigus

175. On the second day after preventive vaccination a 2-year-old boy presented with abdominal pain without clear localization, body temperature rose up to 38°C. On the third day the child got red papular haemorrhagic eruption on the extensor surfaces of limbs and around the joints. Knee joints were edematic and slightly painful. Examination of other organs and systems revealed no pathological changes. What is the most likely diagnosis?

- A. **Haemorrhagic vasculitis**
- B. Thrombocytopenic purpura
- C. Urticaria
- D. DIC syndrome
- E. Meningococemia

176. On the 6th day of life a child got multiple vesicles filled with seropurulent fluid in the region of occiput, neck and buttocks. General condition of the child is normal. What disease should be suspected?

- A. **Vesiculopustulosis**
- B. Miliaria
- C. Impetigo neonatorum
- D. Impetigo
- E. Epidermolysis bullosa

177. A patient is 14 years old. Cytochemical study of punctate revealed 40% of blasts, there was negative reaction to peroxidase and with Sudan black, positive reaction to glycogen. Specify the form of acute leukemia:

- A. **Lymphoblastic**
- B. Monoblastic
- C. Undifferentiated
- D. Promyelocytic
- E. Myeloblastic

178. Six months ago, a 5-year-old child was operated for CHD. For the last 3 weeks he has complained of fever, heart pain, aching muscles and bones. Examination results: "white-coffee" skin colour, auscultation revealed systolic murmur in the region of heart along with a noise in the III-IV intercostal space. Examination of fingertips revealed Janeway lesions. What is your provisional diagnosis?

- A. **Infectious endocarditis**
- B. Nonrheumatic carditis
- C. Sepsis
- D. Acute rheumatic fever

E. Typhoid fever

179. The condition of a 3-year-old child with acute non-rheumatic myocarditis has suddenly deteriorated: he presents with anxiety, acrocyanosis, peripheral edemata, dyspnea. Auscultation of lungs reveals fine moist rales on both sides mainly in the lower parts. AP- 65/40 mm Hg. HR- 150/min, heart sounds are muffled, arrhythmic (extrasystole). Liver is +4 cm. Oliguria is present. The child has been diagnosed with acute heart failure. Which method of examination is most informative for assessing the child's status dynamics?

- A. **Echocardiography**
- B. 24-hour monitoring of heart rhythm
- C. Diuresis monitoring
- D. ECG
- E. Monitoring of K⁺, Na⁺ concentration in blood

180. A hospital admitted an 11-year-old boy diagnosed with medium-severe asthma, exacerbation period. In order to arrest the attacks the boy was administered broncholytic nebulizer therapy. During the day the child's condition stabilized. What is the most appropriate method for further monitoring of respiratory function in this patient?

- A. **Peak flowmetry**
- B. Pneumotachometry
- C. Velocergometry
- D. Bronchodilatation tests
- E. Spirometry

181. A full-term newborn was born with body weight of 4000 g, body length of 57 cm. Reaction to the postnatal check was absent. There was diffuse cyanosis, heart rate of 80/min. What resuscitation measures should be taken?

- A. **Start ALV with a mask**
- B. Intubate the child and start ALV
- C. Give an injection of naloxone
- D. Start tactile stimulation
- E. Give 100% oxygen

182. A 2-year-old child in a satisfactory condition periodically presents with moderate proteinuria, microhematuria. USI results: the left kidney is undetectable, the right one is enlarged, there are signs of double pyelocaliceal system. What study is required to specify the diagnosis?

- A. **Excretory urography**
- B. Retrograde urography
- C. Radioisotope renal scan
- D. Doppler study of renal vessels

E. Micturating cystography

183. An 8-year-old boy has a 2-year history of blotchy itchy rash appearing after eating citrus fruit. The first eruption occurred at the age of 6 months after the introduction of juices to the baby's diet. Father has a history of bronchial asthma, mother - that of allergic rhinitis. What is the most likely diagnosis?

A. Atopic dermatitis

- B. Psoriasis
- C. Urticaria
- D. Quincke's edema
- E. Pityriasis Rosea

184. An 8-year-old child was hospitalized for fever up to 39,8°C, inertness, moderate headache, vomiting. Examination revealed meningeal symptoms. Lumbar puncture was performed. The obtained fluid had raised opening pressure, it was transparent, with the cell count of 450 cells per 1mL (mainly lymphocytes - 90%), glucose level of 2,6 mmol/l. What causative agent might have caused the disease in the child?

A. Enterovirus

- B. Koch's bacillus
- C. Pneumococcus
- D. Staphylococcus
- E. Meningococcus

185. A 3-year-old child with ARVI had been administered biseptol, paracetamol, nazoferon. On the third day of treatment the baby's condition deteriorated: he developed sore throat, stomatitis, conjunctivitis, hypersalivation, painful dark red spots on the neck, face, chest and legs, then the spots were replaced with vesicles. Examination revealed lesions of mucous membranes around the mouth and anus. What is your provisional diagnosis?

A. Stevens-Johnson syndrome

- B. Serum sickness
- C. Bullous dermatitis
- D. Atopic dermatitis
- E. Chickenpox

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

A. Year-round bicillin prophylaxis till the age of 25

- B. Year-round bicillin prophylaxis for 3 years

- C. Course of cardiotrophic drugs twice a year
- D. Tonsillectomy
- E. Oral cavity sanitation

187. A 7-year-old female child has developed an acute condition. She complains of a headache, two onsets of vomiting. Objectively: deferred reactions, body temperature - 39,3°C, pronounced hyperesthesia, nuchal rigidity, positive superior and inferior Brudzinskis signs, symmetric Kernigs sign. What is the provisional diagnosis?

- A. **Meningitis**
- B. Food toxicoinfection
- C. Toxic encephalopathy
- D. Encephalitis
- E. Craniocerebral trauma