ОШСКИЙ ГОСУДАРСТВЕННЫЙ УНИВЕРСИТЕТ
МЕЖДУНАРОДНЫЙ МЕДИЦИНСКИЙ ФАКУЛЬТЕТ

Кафедра клинических дисциплин 2

РАССМОТРЕНО
на заседании кафедры протокол № 4
от «23» 11 2023 года

Зав. Каф. _____ / Бугубаева М. М.

УТВЕРЖДАЮ

Председатель УМС ММФ,
А. М. Базиева
"23" 11 2023г.

ФОНД ТЕСТОВЫХ ЗАДАНИЙ
для итогового контроля по дисциплине
«Госпитальная терапия»

на 2023-2024 учебный год
Направление: 560001 – лечебное дело (GM)

курс – 5, семестр – IX

Наименование дисциплины	Всего	Кредит	Аудиторные занятия (ч)		СРС
			Лекции	Практические	
Предмет		4.	24	36	60.
Кол-во тестовых вопросов	300.				

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г. Ош. 2023г.

MCQs for the subject «Child diseases 2 (Hospital pediatrics)» for students of 5th year of International Medical Faculty of Osh State University specialty «General Medicine» in the 2023-2024 academic year.

1. Two weeks after a viral syndrome, a 2-year-old child develops bruising and generalized petechiae, more prominent over the legs. No hepatosplenomegaly or lymph node enlargement is noted. The examination is otherwise unremarkable. Laboratory testing shows the patient to have a normal hemoglobin, hematocrit, and white blood cell (WBC) count and differential. The platelet count is 15,000/μL. Which of the following is the most likely diagnosis?
a) Von Willebrand disease (vWD)
b) Acute leukemia
c) Idiopathic (immune) thrombocytopenic purpura (ITP)
d) Aplastic anemia
e) Thrombotic thrombocytopenic purpura

2. Specify the activities that are contraindicated for children with acute leukemia.
a) Physiotherapy, insolation
b) Exercise therapy, insolation
c) Massage, biostimulants
d) Physiotherapy, insolation, biostimulants
e) Exercise therapy, massage

3. An 11-month-old African American boy has a hematocrit of 24% on a screening laboratory done at his well-child check-up. Further testing demonstrates: hemoglobin 7.8 g/dL; hematocrit 22.9%; leukocyte count 12,200/μL with 39% neutrophils, 6% bands, 55% lymphocytes; hypochromia on smear; free erythrocyte protoporphyrin (FEP) 114 μg/dL; lead level 6 μg/dL whole blood; platelet count 175,000/μL; reticulocyte count 0.2%; sickle-cell preparation negative; stool guaiac negative; and mean corpuscular volume (MCV) 64 fL. Which of the following is the most appropriate recommendation?
a) Blood transfusion
b) Oral ferrous sulfate
c) Intramuscular iron dextran
d) An iron-fortified cereal
e) Calcium EDTA

4. Find out an error in the judgment of idiopathic thrombocytopenic purpura.
a) Is inherited in an autosomal recessive and dominant manners
b) Is inherited in an autosomal dominant manner
c) The number of platelets in the cbc is below 100 thousand
d) The development of the disease is based on the immunocomplex mechanism
e) Increased amount of antiplatelet antibodies

5. A previously healthy 2-year-old child is known to have sickle cell disease; she now has a 1-hour history of left-sided weakness and ataxia. Which of the following therapies is the most appropriate first step in the management of her likely diagnosis?
a) Iron chelation with deferoxamine
b) Initiation of broad-spectrum antibiotics after obtaining appropriate cultures
c) Cranial ultrasound
d) Arrange for an outpatient MRI of the brain
e) Initiation of a stat blood transfusion

6. A 4-year-old previously well African American boy is brought to the office by his aunt. She reports that he developed pallor, dark urine, and jaundice over the past few days. He stays with her, has not traveled, and has not been exposed to a jaundiced person, but he is taking trimethoprim sulfamethoxazole for otitis media. The CBC in the office shows a low hemoglobin and hematocrit, while his "stat" serum electrolytes, blood urea nitrogen (BUN), and chemistries are remarkable only for an elevation of his bilirubin levels. His aunt seems to recall his 8-year-old brother having had an "allergic reaction" to aspirin, which also caused a short-lived period of anemia and jaundice. Which of the following is the most likely cause of this patient's symptoms?
a) Hepatitis B
b) Hepatitis A
c) Hemolytic-uremic syndrome
d) Gilbert syndrome
e) Glucose-6-phosphate dehydrogenase deficiency

7. Specify the studies that confirm the diagnosis of iron deficiency anemia
a) Gastrointestinal tract
b) Bone marrow
c) The level of serum iron and total iron-binding serum abilities
d) Serum bilirubin level
e) The level of iron in the urine

8. An 11-year-old child arrives to your hospital with a history of recurrent episodes of oral ulcers, fever, pharyngitis, and lymphadenopathy. These fever episodes, which also have been noted in other family members, occur about every 21 days and some of the episodes have been associated with pneumonia and sepsis. The most appropriate therapy for this child's likely condition is which of the following?
a) Splenectomy
b) Recombinant human granulocyte colony-stimulating factor (rhG-CSF)
c) Transfusion of packed red blood cells
d) Infusion of immunoglobulin (IVIG)
e) Transfusion of fresh frozen plasma

9. A 2950-g (6.5-lb) black baby boy is born at home at term. On arrival at the hospital, he appears pale, but the physical examination is otherwise normal. Laboratory studies reveal the following: mother's blood type A, Rh-positive; baby's blood type O, Rh-positive; hematocrit 38%; and reticulocyte count 5%. Which of the following is the most likely cause of the anemia?
a) Fetomaternal transfusion
b) ABO incompatibility
c) Physiologic anemia of the newborn
d) Sickle-cell anemia
e) Iron-deficiency anemia

10. Specify where to treat Hemorrhagic vasculitis in children:
a) On an outpatient basis, observing bed rest
b) On an outpatient basis in a polyclinic
c) On an outpatient basis in a hematological dispensary under the supervision of a hematologist
d) Always in the hospital
e) In any of the listed places, depending on the severity

11. A father brings his 3-year-old daughter to the emergency center after noting her to be pale and tired and with a subjective fever for several days. Her past history is significant for an upper respiratory infection 4 weeks prior, but she had been otherwise healthy. The father denies emesis or diarrhea, but does report his daughter has had leg pain over the previous week, waking her from sleep. He also reports that she has been bleeding from her gums after brushing her teeth. Examination reveals a listless pale child. She has diffuse lymphadenopathy with splenomegaly but no hepatomegaly. She has a few petechiae scattered across her face and abdomen and is mildly tender over her shins, but does not have associated erythema or joint swelling. A CBC reveals a leukocyte count of 8,000/μL with a hemoglobin of 4 g/dL and a platelet count of 7,000/μL. The automated differential reports an elevated number of atypical lymphocytes. Which of the following diagnostic studies is the most appropriate next step in the management of this child?
a) Epstein-Barr virus titers
b) Serum haptoglobin
c) Antiplatelet antibody assay
d) Reticulocyte count
e) Bone marrow biopsy

12. Determine the type of bleeding characteristic of hemophilia A and B.
a) Hematoma
b) Petechial-spotted
c) Mixed bruising-hematoma
d) Loculo-vasculitic
e) Angiomatous

13. Determine the type of bleeding characteristic of thrombocytopenia.
a) Hematoma
b) Petechial-ecchymatous
c) Mixed bruising-hematoma
d) Loculo-vasculitic
e) Angiomatous

14. While bathing her newly received 2-year-old son, a foster mother feels a mass in his abdomen. A thorough medical evaluation of the child reveals anuridia, hypospadias, horseshoe kidney, and hemihypertrophy. Which of the following is the most likely diagnosis for this child?
a) Neuroblastoma
b) Wilms tumor
c) Hepatoblastoma
d) Rhabdomyosarcoma
e) Testicular cancer

15. A healthy 1-year-old child comes to your office for a routine checkup and for immunizations. His parents have no complaints or concerns. The next day, the CBC you performed as customary screening for anemia returns with the percentage of eosinophils on the differential to be 30%. Which of the following is the most likely explanation?
a. Bacterial infections
b. Chronic allergic rhinitis
c. Fungal infections
d. Helminth infestation
e. Tuberculosis

16. Specify the type of bleeding typical for DIC syndrome.
a) Hematoma
b) Petechial-ecchymatous
c) Mixed bruising-hematoma
d) Loculo-vasculitic
e) Angiomatous

17. A 2-year-old child in shock has multiple nonblanching purple lesions of various sizes scattered about on the trunk and extremities; petechiae are noted, and oozing from the venipuncture site has been observed. The child's peripheral blood smear is shown below. Clotting studies are likely to show which of the following?

a. Increased levels of factors V and VIII
b. A decreased prothrombin level
c. An increased fibrinogen level
d. The presence of fibrin split products
e. Normal partial thromboplastin time (PTT)

18. A male infant was found to be jaundiced 12 hours after birth. At 36 hours of age, his serum bilirubin was 18 mg/dL, hemoglobin concentration was 12.5 g/dL, and reticulocyte count was 9%. Many nucleated RBCs and some spherocytes were seen in the peripheral blood smear. The differential diagnosis should include which of the following?

a. Pyruvate kinase deficiency
b. Hereditary spherocytosis
c. Sickle-cell anemia
d. Rh incompatibility
e. Polycythemia

19. On a routine well-child examination, a 1-year-old boy is noted to be pale. He is in the 75th percentile for weight and the 25th percentile for length. Results of physical examination are otherwise normal. His hematocrit is 24%. The answer to which of the following questions is most likely to be helpful in making a diagnosis?

a. What is the child's usual daily diet?
b. Did the child receive phototherapy for neonatal jaundice?
c. Has anyone in the family received a blood transfusion?
d. Is the child on any medications?
e. What is the pattern and appearance of his bowel movements?

20. A 10-year-old boy is admitted to the hospital because of bleeding. Pertinent laboratory findings include a platelet count of 50,000/μL, prothrombin time (PT) of 15 seconds (control 11.5 seconds), activated partial thromboplastin time (aPTT) of 51 seconds (control 36 seconds), thrombin time (TT) of 13.7 seconds (control 10.5 seconds), and factor VIII level of 14% (normal 38%-178%). Which of the following is the most likely cause of his bleeding?

a. Immune thrombocytopenic purpura (ITP)
b. Vitamin K deficiency
c. Disseminated intravascular coagulation (DIC)
d. Hemophilia A
e. Hemophilia B

21. A 17-year-old adolescent comes to your office seeking help for "heavy" menses. Your review of systems also reveals weekly epistaxis. Her only significant past history includes a tonsillectomy at age 6 after which she required blood transfusion for excessive bleeding. Her family history includes several people who seem to bleed and bruise more easily than others. The patient's mother required a hysterectomy after child birth for excessive hemorrhage. You order a variety of laboratory tests. The patient has a hemoglobin of 6.5 mg/dL with an MCV of 60%; her platelet
count is 350,000/μL. Her von Willebrand antigen and her von Willebrand factor (vWF) activity (ristocetin cofactor activity) are decreased. Her vWF is reported as normal but in decreased amounts. You have been unable to reach her to report the findings, but when she calls about 1 week later, she reports she is having a mild to moderate nosebleed. You initiate therapy with which of the following?

a. Aminocaproic acid (Amicar)
b. vWF concentrate alone
c. vWF with factor VIII
d. Desmopressin (DDAVP)
e. Intravenous immunoglobulin (IVIG)

22. Specify the type of bleeding typical for hemorrhagic vasculitis.

a. Hematoma
b. Petechial-spotted
c. Mixed bruising-hematoma
d. Loculo-vasculitic
e. Angiomatous

23. Determine the dosage of fresh frozen plasma transfusion in children with DIC.

a) 1-2 ml/kg
b) 3-5 ml/kg
c) 10-15 ml/kg
d) 20-30 ml/kg
e) 40-60 ml/kg

24. Indicate a clinical sign, uncharacteristic for DIC.

a) Hemorrhagic syndrome
b) Hemocoagulation shock
c) Anemia
d) Functional organ failure
e) Broncho-obstructive syndrome

25. Find the cause of anemia in children with DIC.

a) Iron deficiency
b) Vitamin b-12 deficiency
c) Folic acid deficiency
d) Bleeding
e) Bone marrow aplasia

26. An otherwise healthy 17-year-old boy complains of swollen glands in his neck and groin for the past 6 months and an increasing cough over the previous 2 weeks. He also reports some fevers, especially at night, and possibly some weight loss. On examination, you notice that he has nontender cervical, supraclavicular, axillary, and inguinal nodes, no hepatosplenomegaly, and otherwise looks to be fairly healthy. Which of the following would be the appropriate next step?

a) Biopsy of a node
b) CBC and differential
c) Trial of antituberculosis drugs
d) Chest radiograph
e) Cat-scratch titers

27. An otherwise healthy child has on his 1-year-old routine CBC the polymorphonuclear neutrophil shown below. Which of the following is an appropriate next step?

a) Bone marrow aspiration
b) Begin oral iron therapy
c) Begin folic acid supplementation
d) Hemoglobin electrophoresis
e) Initiate monthly infusions of intravenous immunoglobulins (IVIG)

28. Over the previous 2 to 3 weeks, a very active 13-year-old white boy is noted by his family to have developed deep pains in his leg that awaken him from sleep. The family brings him to your office with a complaint of a swelling over his distal leg, which he attributes to his being kicked while playing soccer about 1 week ago. He has had no fever, headaches, weakness, bruising, or other symptoms. A radiograph of the leg is shown below. Which of the following is the most appropriate next step?

a. Reassurance to the family of the benign nature of the condition
b. Bone marrow aspiration
c. Serial blood cultures and initiation intravenous vancomycin
d. Splinting of leg and reduction in activity
e. Bone biopsy

29. On a routine-screening CBC, a 1-year-old child is noted to have a microcytic anemia. A follow-up hemoglobin electrophoresis demonstrates an increased concentration of hemoglobin A2. The most appropriate next step in the management of this child's condition is which of the following?

a) Initiate oral iron therapy.
b) Provide family counseling alone.
c) Begin oral, daily folate, and penicillin therapy.
d) Arrange for a bone marrow aspiration.
e) Initiate therapy with dimercaptosuccinic acid (Succimer).

30. After being delivered following a benign gestation, a newborn infant is noted to have a platelet count of 35,000/μL, decreased fibrinogen, and elevated fibrin split products. On examination, you note a large cutaneous hemangioma on the abdomen that is purple and firm. Which of the following anomalies might also be expected to explain this child's condition?

a) Kaposiform hemangioendothelioma
b) Nevus simplex
c) Nevus flammeus
d) PHACE(S) syndrome
e) Infantile fibrosarcoma

31. Specify the clinical manifestations of thrombocytopenic purpura.

a) Symmetrical red rash in the form of spots and papules on extensor surfaces
b) Bruises and punctate hemorrhages throughout the body, nosebleeds
c) Hemorrhages in the joints, nosebleeds
d) Cramping abdominal pain
e) Nosebleeds

32. Specify the activated partial thromboplastin time in hypercoagulation of DIC-syndrome.

a) Norm
b) Decrease
c) Increase
d) Significantly increase
e) Decrease or increase

33. Find out the prothrombin index in hypocoagulation of DIC-syndrom.

a) Norm
b) Decrease
c) Increase
d) Significantly increase
e) Decrease or increase

34. Specify the dosage of heparin in children with DIC-syndrome.

a) 1-2 units/kg/hour
b) 5-7 units/kg/hour
c) 8-10 units/kg/hour
d) 20-30 units/kg/hour
e) 40-50 units/kg/hour

35. Determine the most common cases of death of children with ANCA associated vasculitis.

a) Liver failure
b) Heart failure

c) Intercurrent infections
d) Hemorrhage in the brain
e) Gastrointestinal problems

36. Indicate the change in the number of reticulocytes in aplastic anemia (AA).
a) Norm
b) Reduced
c) Little increased
d) Significantly increased
e) Little reduced

37. Classify the aplastic anemia
a) Congenital and acquired
b) Acute and chronic
c) Light, heavy
d) Infectious, non-infectious
e) Mild, severe

38. Indicate the difference between Fanconi anemia and Diamond-Blackfan anemia.
a) Decrease in red blood cells
b) Decrease in reticulocytes
c) Decrease in ESR (erythrocyte sedimentation rate)
d) Decrease in platelets
e) Decrease in hematocrit

39. Specify the most effective diagnostic method of aplastic anemia.
a) Biopsy of bone marrow
b) Blood test
c) Urine analysis
d) Puncture of lymph node
e) Biochemical analysis

40. Specify the most effective treatment for aplastic anemia
a) Prednisone
b) BM (Bone marrow) transplantation
c) Cytostatics
d) Antibiotics
e) Non-steroidal anti-inflammatory drugs

41. Explain the term pancytopenia.
A) Decrease of RBC
B) Decrease of leukocytes
C) Decrease of platelets
D) Decrease of eosinophils
E) Decrease of RBC, leukocytes, platelets

42. Specify the change, which depend on aplastic anemia and hemorrhagic syndrome in children.
A) Decrease of RBC
B) Decrease of leukocytes
C) Decrease of platelets
D) Decrease of eosinophils
E) Decrease of Hb

43. Find the difference between aplastic anemia and acute lymphoblastic leukemia.
A) Absence of hemorrhagic rash
B) Absence of bleedings
C) Absence of fever
D) Absence of pallor
E) Absence of increase lymph nodes

44. Define the disease for which microcephaly is characteristic.
A) Anemia Fanconi
B) Anemia Diamond-Blackfan
C) Autoimmune hemolytic anemia
D) Transient erythroblastopenia
E) Congenital dyskeratosis

45. Indicate the medicine used in the absence of a suitable donor for aplastic anemia.
A) Antibiotics
B) Immunosuppressants
C) Anticoagulants
D) Disaggregants
E) Non-steroidal anti-inflammatory drugs

46. Specify the clinical manifestations of hemophilia: 1) symmetrical red rash in the form of papules and spots on extensor surfaces; 2) bruises and petechial hemorrhages all over the body; 3) subcutaneous and intramuscular hematomas; 4) incessant bleeding due to injuries, extraction of teeth; 5) hemorrhages in the joints.
a) 3, 4, 5
b) 4, 5
c) 1, 4, 5
d) 3, 5
e) 1, 2, 5

47. Specify the clinical manifestations of hemorrhagic vasculitis: 1) symmetrical hemorrhagic rash in the form of papules and spots on extensor surfaces of the joints; 2) cramping pain in the abdomen 3) subcutaneous and intramuscular hematomas; 4) incessant bleeding with minor injuries.
a) 1, 3
b) 1, 2
c) 2, 4
d) 1, 2, 3
e) 1, 4

48. Specify the hematological parameters characteristic for hereditary microspherocytic anemia.
1) decrease in color index; 2) reticulocytosis; 3) microspherocytosis of erythrocytes; 4) decrease in osmotic resistance of erythrocytes.
a) 1, 3
b) 1, 2
c) 2, 3, 4
d) 1, 2, 3
e) 1, 4

49. Specify drugs that are undesirable to prescribe child with thrombocytopenic purpura: 1) aspirin 2) carbenicillin; 3) ampicillin; 4) calcium gluconate.
a) 1, 3
b) 1, 2
c) 2, 3, 4
d) 1, 2, 3
e) 1, 4

50. Find the regenerative form of erythrocytes.
a) Reticulocytes
b) Polychromatophiles
c) Poikilocytes
d) Anisocytes
e) Normoblasts

51. Find from the listed laboratory indicators characteristic of iron deficiency anemia: 1) sideropenia; 2) hypochromia; 3) thrombocytopenia; 4) the appearance of blasts in peripheral blood; 5) anisocytosis, poikilocytosis.
a) 1, 3
b) 1, 2
c) 2, 3, 4
d) 1, 2, 5
e) 1, 4

52. Specify the characteristic symptoms for aplastic anemia: 1) leukopenia, 2) high reticulocytosis 3) leukocytosis; 4) thrombocytopenia; 5) anemia.
a) 1, 3
b) 1, 2
c) 2, 3, 4
d) 1, 2, 5
e) 1, 4, 5

53. Identify diseases that are characterized by pancytopenia: 1) acute leukemia 2) hemorrhagic vasculitis 3) aplastic anemia 4) idiopathic thrombocytopenic purpura.
a) 1, 3
b) 1, 2
c) 2, 3, 4
d) 1, 2, 5
e) 1, 4, 5

54. Choose the changes characteristic of folate deficiency anemia: 1) decrease in the number of erythrocytes 2) increase in the size of erythrocytes 3) hypochromia 4) hyperchromia.
a) 1, 3
b) 1, 2, 4
c) 2, 4
d) 1, 2,
e) 1, 4, 5

55. Find a diagnosis that can be made with a serum iron value of 3-7 μmol/l.
a) chronic hemolysis
b) aplastic anemia
c) iron deficiency anemia
d) folate deficiency anemia
e) b, d

56. Choose disorders characteristic of stage III DIC: 1) hemarthrosis 2) hemorrhagic skin rashes 3) disorders of blood clot retraction 4) hypofibrinogenemia.
a) 1, 3
b) 1, 2, 4
c) 2, 3, 4
d) 1, 2,
e) 1, 4, 5

57. Name the changes in the cardiovascular system in children with severe iron deficiency anemia: 1) tachycardia 2) systolic murmur over the apex 3) displacement of the boundaries of relative cardiac dullness to the left 4) muffled heart sounds 5) paroxysmal tachycardia.
a) 1, 3, 4
b) 1, 2, 5
c) 2, 3, 4
d) 1, 2, 3, 4
e) 1, 4, 5

58. Determine the route of transmission of Fanconi anemia.
a) autosomal recessive
b) autosomal dominant
c) linked to the X chromosome
d) linked to the Y chromosome
e) sporadic

59. Select the disease, for which 50% of sick children are characterized by congenital bone anomalies.
a) Diamond-Blackfan anemia
b) Fanconi anemia
c) Autoimmune aplastic anemia
d) transient erythroblastopenia
e) Congenital dyskeratosis

60. Indicate the risk of exposure of children with aplastic anemia.
a) Diabetes
b) autoimmune thyroiditis
c) HIV
d) sarcoma
e) hepatitis

61. Children with severe aplastic anemia (Hb <70 g/l) need replacement:
a) erythrocytes
b) platelet concentrate
c) leukocytes
d) Granulocyte colony-stimulating factors
e) IG

62. In children with aplastic anemia and thrombocytopenia (< 30 000/μl) it's necessary for substitution:

a) Platelet concentrate
b) Erythrocytes
c) Leukocytes
d) Granulocytic colony stimulating factors
e) Ig

63. In children with aplastic anemia and neutropenia (< 500/μl) it's necessary for substitution:
a) Erythrocytes
b) Platelet concentrate
c) Granulocytic colony stimulating factors
d) Leukocytes
e) Ig

64. Select the most frequency type of deficiency anemia in children.
a) Protein
b) Iron
c) Vitamin B6
d) Folic acid
e) Vitamin B12

65. Select the most common reason of IDA (Iron-deficiency anemia) in early age children.
a) Infections
b) Wrong feeding
c) Bleeding
d) Malabsorption syndrome
e) Sun deficiency

66. Determine the type of severity anemia in children if Hb = 85 g/l.
a) Mild
b) Moderate
c) Severe
d) Very severe
e) Norm

67. Name the symptoms characteristic of sideropenia: 1) trophic disorders of the skin and its appendages (hair, nails) 2) change in taste and smell 3) malabsorption syndrome 4) increased susceptibility to respiratory and intestinal infections 5) increased appetite.
a) 1, 3, 4
b) 1, 2, 5
c) 2, 3, 4, 5
d) 1, 2, 3, 4
e) 1, 4, 5

68. Name the changes in the cardiovascular system in children with severe iron deficiency anemia: tachycardia 2) systolic murmur over the apex 3) displacement of the boundaries of relative cardiac dullness to the left 4) muffled heart sounds 5) paroxysmal tachycardia.
a) 1, 3, 4
b) 1, 2, 3
c) 2, 3, 4, 5
d) 1, 2, 3, 4
e) 1, 4, 5

69. Name the diseases in which chronic posthemorrhagic anemia develops: 1) idiopathic hemosiderosis of the lungs 2) trichocephalosis 3) Meckel's diverticulum 4) malabsorption syndrome 5) acute pneumonia.
a) 1, 3, 4
b) 1, 2, 3, 4
c) 2, 3, 4, 5
d) 1, 2, 3
e) 1, 4, 5

70. List the indications for the appointment of vitamin B12 in iron deficiency anemia: 1) hyporegenerative type of erythropoiesis 2) hypochromia in combination with macrocytosis 3) hypochromia in combination with microcytosis 4) sideropenia.
a) 1, 3
b) 1, 2
c) 2, 3
d) 1, 2, 4
e) 1, 4

71. Specify complaints typical for B12-folate deficiency anemia in children: 1) hair loss 2) tongue pinching 3) goosebumps 4) pallor.
a) 1, 3
b) 1, 2
c) 2, 3, 4
d) 1, 2, 4
e) 1, 4

72. Usual level of RET in children with IDA:
a) Normal
b) Very high
c) Slightly elevated
d) Reduced
e) Very low

73. The treatment of IDA in children includes:
a) Diet
b) Fe-Lek per os
c) Fe-Lek per os + diet
d) Fe-Lek i/v
e) Fe- Lek i/m

74. If the reticulocyte count is above 5%, iron deficiency anemia is:
a) Hyporegenerative
b) Slightly hyporegenerative
c) Regenerative
d) Hyperregenerative
e) Slightly regenerative

75. Hypochromic anemia means:
A) < Hb in RBC
B) < RBC
C) < MCV in RBC
D) Different forms of RBC
E) < Osmotic fragility test

76. Anemia in children 1-6 years old begins with level of Hb
a) 119 g/l
b) 99 g/l
c) 109 g/l
d) 89 g/l
e) 79 g/l

78. Ferritin means
A) Heme iron
B) Tissue fund
C) Transport fund
D) Reserve fund
E) Iron of respiratory enzymes

79. Dosage of iron for treatment of IDA in children
A) 1 mg/kg/day
B) 2 mg/kg/day
C) 5 mg/kg/day
D) 7 mg/kg/day
E) 9 mg/kg/day

80. When iron is used parenterally for IDA?
A) Moderate anemia
B) Severe anemia
C) Gastrointestinal problems
D) 1 year of age
E) With infections

81. Intracellular hemolysis characterized by
a) < Hb, < RBC, >RET, >Spleen, Jaundice +
b) < Hb, < RBC, <RET, >Spleen, Jaundice +
c) < Hb, < RBC, >RET, N Spleen, Jaundice -
d) < Hb, < RBC, N RET, >Spleen, Jaundice +
e) < Hb, < RBC, <RET, < Spleen, Jaundice +

82. Differences between intracellular hemolysis and intravascular hemolysis
A) In the level of RET
B) In the level of Hb
C) In the level of RBC
D) In the Hb-uria
E) In the level of leukocytes

83. Immune HA (hemolytic anemia) and non-immune HA are different by
A) level of Hb,
B) level of RET
C) Jaundice +/-
D) Coombs test +/-
E) Level of RBC

84. The most effective treatment of acquired hemolytic anemia in children
A) Antibiotics
B) Ig i/m
C) Splenectomy
D) Ig i/v + prednisolone
E) Anticoagulants

85. The most effective treatment of congenital hemolytic anemia in children
A) Prednisolone
B) Ig i/v
C) Splenectomy
D) Rituximab
E) Ig i/m

86. In children with hemolytic anemia bilirubin is changed
A) > Conjugated fraction
B) > Non- Conjugated fraction
C) < Conjugated fraction
D) < Non-conjugated fraction
E) > Conjugated fraction and non-conjugated fraction

87. Splenectomy is affected in
A) Autoimmune hemolytic anemia (HA)
B) Infections HA
C) Toxic HA
D) Hemolytic-uremic syndrome
E) Hereditary spherocytosis

88. Decreased size of RBC called
A) Microcytes
B) Macrocytes
C) Schizocytes
D) Sickle cells
E) Hypochromic cells

90. Increased size of RBC called
A) Microcytes
B) Macrocytes
C) Schizocytes
D) Sickle cells
E) Hypochromic cells

91. Destruction of RBC called
A) Microcytes
B) Macrocytes
C) Schizocytes
D) Sickle cells
E) Hypochromic cells

92. Sickle cells of RBC are characteristic for
A) IDA
B) Membrane defect of RBC
C) Hemoglobinopathies
D) Deficiency of enzymes of RBC
E) Deficiency of folic acid

93. Schizocytes are characteristic for
A) Hemolytic-uremic syndrome
B) Membrane defect of RBC
C) Hemoglobinopathies
D) Deficiency of enzymes of RBC
E) Deficiency of folic acid

94. Microspherocytes are characteristic for
A) Hemolytic-uremic syndrome
B) Membrane defect of RBC
C) Hemoglobinopathies
D) Deficiency of enzymes of RBC
E) Deficiency of folic acid

95. The most common cause of hemolysis in children is
A) Elliptocytosis
B) Hereditary spherocytosis
C) Hemoglobinopathies
D) Deficiency of enzymes of RBC
E) Deficiency of folic acid

96. Transmission pathway of hereditary spherocytosis
A) Autosomal recessive
B) Autosomal dominant
C) Linked with X chromosome
D) Linked with Y chromosome
E) Sporadic

97. Food promoting hemolytic crisis in 6 glucose phosphate dehydrogenase - deficiency
A) Meat
B) Eggs
C) Beans
D) Bread
E) Milk

98. Treatment of first line for autoimmune hemolytic anemia
A) Prednisolone
B) Ig i/v
C) Antibiotics
D) Vitamins
E) Cytostatic drugs

99. The most effective treatment of autoimmune hemolytic anemia is
A) Rituximab
B) Antibiotics
C) Vitamins
D) Prednisolone
E) Ig

100. Splenectomy in children with hemolytic anemia is possible from
A) 1 year old
B) 2 years old
C) 5 years old
D) 7 years old
E) 10 years old

101. Thrombocytopenia begins from the level of platelets
A) $<300x10^9/l$
B) $<250x10^9/l$
D) $<150x10^9/l$
C) $<200x10^9/l$
E) $<100x10^9/l$

102. Differential sign between thrombocytopenic purpura (TP) and leukemia
A) Petechiae
B) Ecchymosis
E) Lymphadenopathy
C) Bleeding
D) Pallor

103. Differential sign between thrombocytopenic purpura and leukemia
a) Hepatosplenomegaly
b) Petechiae
c) Ecchymosis
d) Bleeding
e) Pallor

104. Differential sign between thrombocytopenic purpura and leukemia
A) Petechiae
B) Ecchymosis
C) Bleeding
E) Bone pain
D) Bone pain, Pallor

105. Function of platelets is
A) Hemostatic
B) Immunological
C) Homeostatic
D) Participation in the exchange of Ca and P
E) Participation in the exchange of Na and K

106. Autor first described clinical picture of thrombocytopenic purpura
a) Fanconi
b) Werlhof
c) Dimond
d) Blacfan
e) Henoch

107. The most common type of thrombocytopenic purpura
A) Neonatal thrombocytopenia
B) Secondary thrombocytopenia
C) Autoimmune (idiopathic) thrombocytopenia
D) Non-immune thrombocytopenia
E) Congenital thrombocytopenia

108. Destruction of platelets in thrombocytopenic purpura depends on
a) Fc receptors of lymph nodes
b) Fc receptors of splenic macrophages
c) Fc receptors of liver macrophages
d) Fc receptors of bone macrophages
e) Fc receptors of lung macrophages

109. Season of more often cases of TP is
A) Summer
B) Early spring
C) Late spring, Autumn
D) Late spring
E) No season

110. Test for differentiation immune and non-immune thrombocytopenic purpura
A) Coombs
B) Bleeding time
C) Clothing time
D) Level of thrombocytes
E) D- dimer

111. Type of bleeding in children with thrombocytopenic purpura
A) Petechial
B) Petechial- spotty
C) Spotty
D) Hematoma
E) Ecchymous

112. Treatment of mild autoimmune thrombocytopenic purpura
A) Do not treat
B) Ig i/v
C) Prednisolone
D) Erythrocytes
E) Rituximab

113. Treatment of moderate autoimmune thrombocytopenic purpura without bleeding
A) Do not treat
B) Ig i/v
C) Prednisolone
D) Erythrocytes
E) Rituximab

114. First line of treatment of severe autoimmune thrombocytopenic purpura
A) Antibiotics
B) Ig i/v
C) Prednisolone
D) Erythrocytes
E) Rituximab

115. Dosage of Ig i/v in children with autoimmune thrombocytopenic purpura
A) 0.1 -0.2 g/kg/1-2 days
B) 0.5 -0.7 g/kg/1-2 days
C) 0.8 -1 g/kg/1-2 days
D) 0.5 -2 g/kg/1-2 days
E) 2 -3 g/kg/1-2 days

116. Treatment of chronic severe forms of autoimmune thrombocytopenic purpura
A) Prednisolone
B) Ig i/v
C) Antibiotics
D) Rituximab
E) Vitamins

117. Reason of platelets destruction in autoimmune thrombocytopenic purpura
A) Antibodies
B) T-lymphocytes
C) Complement
D) Neutrophiles
E) Eosinophils

118. Bleeding in children with thrombocytopenic purpura usually begins from the level of platelets
A) $100x\ 10^9/l$
B) $150x\ 10^9/l$
C) $50x\ 10^9/l$
D) $10x\ 10^9/l$
E) $5x\ 10^9/l$

119. Severity of thrombocytopenic purpura depends on
A) Hemorrhagic rash
B) Bleeding
C) Anemia
D) Splenomegaly
E) Hepatomegaly

120. Chronic course of autoimmune thrombocytopenic purpura more often occur in
A) Virus infections
B) Bacterial infections
C) Drugs
D) Vaccines
E) Systemic lupus erythematosus

121. Severity of Hemophilia A when FVIII = 10%
A) Mild
B) Moderate
C) Severe
D) Very severe
E) Asymptomatic

122. Parameters changed in Hemophilia
A) Clotting time
B) Bleeding time
C) Level of platelets
D) Retraction of a blood clot

E) D-dimer

123 Which situation the girls may suffer from Hemophilia?

A) Dad is healthy, mother is a carrier of pathological gene
B) Dad is sick, mother is healthy
C) Dad is sick, mother is a carrier of pathological gene
D) Dad is a carrier of pathological gene, mother is a carrier of pathological gene
E) Dad is a carrier of pathological gene, mother is healthy

124. The 1-st symptom of Hemophilia in children usually is

A) Nose bleeding C) UT bleeding E) Petechiae
B) GI bleeding D) Hemarthrosis

125. Method of administration of factors in Hemophilia (H)

A) Subcutaneous C) Intravenous jet E) Per os
B) Intramuscular D) Intravenous drip

126. The pathway of Hemophilia

A) Autosomal -recessive D)Dominant, X chromosome linked
B) Autosomal-dominant E) Sporadic
C) Recessive, X chromosome linked

127. Coagulation factor, which is reduced in hemophilia A

A) V C) VIII E) XII
B) VII D) IX

128. Coagulation factor, which is reduced in hemophilia B

A) V C) VIII E) XII
B) VII D) IX

129. Coagulation factor, which is reduced in hemophilia C

A) V C) VIII E) XI
B) VII D) IX

130. What type of Hemophilia is more often in children?

A) Hemophilia A C) Hemophilia C E) Mixed
B) Hemophilia B D) Unknown

131. A 6-month-old infant has been exclusively fed a commercially available infant formula. Upon introduction of fruit juices, however, the child develops jaundice, hepatomegaly, vomiting, lethargy, irritability, and seizures. Tests for urine-reducing substances are positive. Which of the following is likely to explain this child's condition?

a. Tyrosinemia d. α1-Antitrypsin deficiency
b. Galactosemia e. Glucose-6-phosphatase deficiency
c. Hereditary fructose intolerance

132. A 12-year-old healthy girl has some dizziness while at synagogue. At the outside ER where she is seen testing, shows her to have a hemoglobin of 8 mg/dL, a white blood cell (WBC) count of 4000/μL, and a platelet count of 98,000/μL. Physical examination reveals an enlarged spleen. Her urine pregnancy test is negative, as are her chest radiographs and EKG. As she was no longer dizzy, she was discharged home to follow up with you. She arrives 3 days later having sustained an injury to her thigh. You obtain a radiograph of her femur described as "appearing to be an Erlenmeyer flask". You find no fracture but the entire clinical picture suddenly becomes more worrisome and you order a bone marrow biopsy and measure which of the following?

a. Sphingomyelinase activity d. Glucocerebrosidase
b. Hexosamidase A e. Ceramide trihexosidase
c. Sulfatase A

133. The parents of a 14-year-old boy are concerned about his short stature and lack of sexual development. By history, you learn that his birth weight and length were 3 kg and 50 cm, respectivelyThe physical examination is normal and his growth curve is shown. His upper-to-lower segment ratio is 0.98. A small amount of fine axillary and pubic hair is present. There is no scrotal pigmentation, his testes measure 4 0 cm3 and his penis is 6 cm in length. In this situation, which of the following is the most appropriate course of action?

a. Measure pituitary gonadotropin d. Measure serum testosterone levels
b. Obtain a CT scan of the pituitary area e. Reassure the parents that the boy is norm
c. Biopsy his testes

134. Friends are considering adopting a "special needs" child from another country. The family has few details, but the video provided by the Bombay, India adoption agency of the 4-year-old child shows an adorable, healthy-appearing, active, blue-eyed boy. The child does not speak much on the video, rather lapses into gibberish sounds, and does not seem to follow directions from the social worker very well. You are suspicious this child may have which of the following syndromes?

a. Kleinfelter c. Marfan e. Turner
b. Waardenberg d. Down

135. During a routine well-child examination, a 12-year-old girl reports that she has occasional headache, "racing heart," abdominal pain, and dizziness. Her mother states that she has witnessed one of the episodes, which occurred during an outing at the mall, and reported the child to be pale and to have sweating as well. Other than some hypertension, she has a normal physical examination. Which of the following is an appropriate next step in the evaluation and management of this child?

a. Breath into a paper sack should the symptoms return
b. Measurement of serum β-HCG levels
c. Determination of HbA1C levels
d. Measurement of urine vanillylmandelic acid (VMA) and homovanillic acid (HVA) and serum metanephrine levels
e. MRI of the brain

136. The 10-year-old child shown weighs 55 kg (> 99 percentile; 50 percentile for a 14 year old), has central fat distribution, is 125-cm tall (5 percentile), has a blood pressure of 120/80 mm Hg, a hematocrit of 17%, and her bone films are read as "osteopenic." Which of the following disorders is most likely responsible for the clinical picture that this boy presents?

a. Bilateral adrenal hyperplasia d. Craniopharyngioma
b. Adrenal adenoma e. Ectopic adrenocorticotropin-producing tumor
c. Adrenal carcinoma

137. A 6-year-old boy is brought to your practice by his paternal grandmother for his first visit. She has recently received custody of him after his mother entered the penal system in another state; she does not have much information about him. You note that the child is short for his age, has downslanting palpebral fissures, ptosis, low-set and malformed ears, a broad and webbed neck, shield chest, and cryptorchidism. You hear a systolic ejection murmur in the pulmonic region. His grandmother reports that he does well in regular classes, but has been diagnosed with learning disabilities and receives speech therapy for language delay. His constellation of symptoms is suggestive of which of the following?

a. Noonan syndrome c. Turner syndrome e. Down syndrome
b. Congenital hypothyroidism d. Congenital rubella

138. You see in consultation a 2-year-old child from a local institution for chronically ill children. He was born normal but had significant developmental delay noted in the first months of life. Early in his life he had significant vomiting and was once evaluated for pyloric stenosis although the testing for this was negative. He is now hyperactive, and has much purposeless movements with rhythmic rocking and athetosis noted. The family notes that his only other illnesses have been mild seborrhea and eczema, which have got better over time. As you compare him to his 2 older siblings in the room, you note that his skin is of lighter color. You note a distinctive, unpleasant "mousy" smell in the room. Which of the following testing results is likely to explain this child's condition?

a. Elevated quantitative fecal fat levels
b. Elevated levels of blood or urine succinylacetone
c. Finding of high blood levels of methionine and homocystine
d. Elevated serum phenylalanine levels
e. Finding on plasma amino acid analysis elevations of leucine, isoleucine, valine, and alloisoleucine and depression of alanine

139. An otherwise healthy 7-year-old child is brought to you to be evaluated because he is the shortest child in his class. Careful measurements of his upper and lower body segments demonstrate normal body proportions for his age. Which of the following disorders of growth should remain in your differential?

a. Achondroplasia c. Hypothyroidism
b. Morquio disease d. Growth hormone deficiency

e. Marfan syndrome

140. The state laboratory calls your office telling you that a newborn infant, now 8 days old, has an elevated thyroid stimulating hormone (TSH) and low thyroxin (T4) on his newborn screen. If this condition is left untreated, the infant is likely to demonstrate which of the following in the first few months of life?

a. Hyperreflexia
b. Hyperirritability
c. Diarrhea
d. Prolonged jaundice
e. Hyperphagia

141. A 12-year-old girl has a solitary thyroid nodule found on routine examination, she has no symptoms. Which of the following is the most appropriate next step for this patient?

a. Fine needle aspirate
b. CT scan of the neck
c. Serum thyroid function tests
d. Trial of suppressive T4 treatment to look for nodule shrinkage
e. Excisional biopsy

142. The 16-month-old male infant pictured below was recently brought from a developing country to the United States. The family history reveals that his father had an eye and a leg removed. Which of the following is the most likely diagnosis?

a. Coloboma of the choroid
b. Retinal detachment
c. Nematode endophthalmitis
d. Retinoblastoma
e. Persistent hyperplastic primary vitreous

143. A 4-year-old child has mental retardation, shortness of stature, brachydactyly (especially of the fourth and fifth digits), and obesity with round facies and short neck. The child is followed by an ophthalmologist for subcapsular cataracts, and has previously been noted to have cutaneous and subcutaneous calcifications, as well as perivascular calcifications of the basal ganglia. This patient is most likely to have which of the following features?

a. Hypercalcemia
b. Hypophosphatemia
c. Elevated concentrations of parathyroid hormone
d. Advanced height age
e. Decreased bone density, particularly in the skull

144. A 15-year-old boy has been immobilized in a double hip spica cast for 6 weeks after having fractured his femur in a skiing accident. He has become depressed and listless during the past few days and has complained of nausea and constipation. He is found to have microscopic hematuria and a blood pressure of 150/100 mm Hg. Which of the following is the most appropriate course of action?

a. Request a psychiatric evaluation.
b. Check blood pressure every 2 hours for 2 days.
c. Collect urine for measurement of the calcium to creatinine ratio.
d. Order a renal sonogram and intravenous pyelogram (IVP).
e. Measure 24-hour urinary protein.

145. An adolescent with type 1 diabetes returns for a follow-up visit after his annual check-up last week. You note that his serum glucose is elevated, and his glycosylated hemoglobin (hemoglobin A1C) is 16.7%. This finding suggests poor control of his diabetes over at least which of the following time periods?

a. 8 hours
b. 1 week
c. 1 month
d. 2 months
e. 6 months

146. A 7-day-old boy is admitted to a hospital for evaluation of vomiting and dehydration. This is the third child for this family, and the prenatal history was uncomplicated. Physical examination on the child is normal except for some hyperpigmentation of the nipples. Serum sodium and potassium concentrations are 120 mEq/L and 9 mEq/L (without hemolysis), respectively; serum glucose is 35 mg/dL. Which of the following testing is most likely to result in this child's diagnosis?

a. Ultrasound of the pylorus
b. Measure of his 17-hydroxyprogrosterone level
c. Measurement of his T3, T4, and TSH levels
d. MRI of the pituitary
e. Chemical analysis of the commercial formula being fed to the child

147. A small-for-gestational-age infant is born at 30 weeks' gestation. At 1 hour of age, his serum glucose is noted to be 20 mg/dL (normally greater than 40 mg/dL). Which of the following is the most likely explanation for hypoglycemia in this infant?

a. Inadequate stores of nutrients
b. Adrenal immaturity
c. Pituitary immaturity
d. Insulin excess
e. Glucagon deficiency

148. A 1-day-old normal-appearing infant develops tetany and convulsions. He was born at 34 weeks' gestation with Apgar scores of 2 and 4 (at 1 and 5 minutes, respectively) to a woman whose pregnancy was complicated by diabetes mellitus and pregnancy-induced hypertension. Which of the following serum chemistry values is likely to be the explanation for his condition?

a. Serum bicarbonate level of 22 mEq/dL.
b. Serum calcium of 6.2 mg/dL.
c. Serum glucose of 45 mg/dL.
d. Serum magnesium level of 5.0 mg/dL.
e. Intracranial hemorrhage

149. Name the manifestations most characteristic of insulin deficiency: 1. weight gain 2. hyperinsulinemia 3. thirst, polyuria, weight loss 4. tendency to hypoglycemia 5. decrease in the level of C-peptide in the blood.

a) 3, 5
b) 1, 2, 4
c) 2, 3, 4
d) 1, 2,
e) 4, 5

150. Name the manifestations most characteristic of excess insulin: 1. weight gain 2. hyperinsulinemia 3. thirst, polyuria, weight loss 4. tendency to hypoglycemia 5. decrease in the level of C-peptide in the blood.

a) 3, 5
b) 1, 2, 4
c) 2, 3, 4
d) 1, 2,
e) 4

151. Specify the signs characteristic of type 1 diabetes mellitus: a) thirst, polyuria b) acute onset c) lack of body weight d) decrease in insulin levels in the blood e) relative deficiency of insulin f) gradual imperceptible onset g) overweight h) need for continuous insulin therapy.

a) a, b, c, d, h
b) b, c, d, g, h
c) a, g, d, h
d) a, c, d, h
e) a, g, h

152. Specify the signs characteristic of type II diabetes mellitus: a) thirst, polyuria b) acute onset c) lack of body weight d) decrease in insulin levels in the blood e) relative deficiency of insulin f) gradual imperceptible onset g) overweight h) need for continuous insulin therapy.

a) e, f, g, h
b) b, c, d
c) e, f, g
d) a, c, g
e) a, g, h

153. Determine the symptoms characteristic of congenital hypothyroidism: a) delayed psychomotor development b) long-term neonatal jaundice c) dry skin d) tachycardia e) bradycardia f) weight loss g) sweating

a) a, b, c
b) b, c, e, d
c) a, b, c, d
d) c, d, g
e) a, d, f, g

154. Determine the symptoms characteristic of diffuse toxic goiter: a) delayed psychomotor development b) long-term neonatal jaundice c) dry skin d) tachycardia e) bradycardia f) weight loss g) sweating

a) b, c, d
b) e, f, g
c) a, c, g
d) d, f, g
e) a, g, h

155. In a 14-year-old girl with excess weight and no complaints, twice the level of glycemia after an oral test after 2 hours was -7.2 and 6.9 mmol/l. Your conclusion:

a) Fasting glucose disorder
b) Diabetes mellitus, type I
c) Diabetes mellitus, type 2
d) Impaired glucose tolerance
e) Impaired insulin tolerance

156. A 5-year-old boy with right-sided inguinal cryptorchidism is worried about pain in the area of a retained testicle. Your action:

a) Human chorionic gonadotropin therapy
b) Immediate surgery
c) Androgen drug therapy
d) Glucocorticoid therapy
e) Anabolic steroid therapy

157. Boy 15 years old. At the age of 5, an orchiopexy was performed on the right. It has well developed secondary sexual characteristics. The left testicle is small, flabby. The size of the right testicle corresponds to age, the consistency is elastic. Your diagnosis:

a) Primary hypogonadism
b) Condition after right-sided orchiopexy
c) Hypoplasia of the left testicle
d) False male hermaphroditism
e) Secondary hypogonadism

158. The child has diabetic ketoacidosis. The most effective way to prescribe fast-acting insulin with hourly glycemic control is:
a. U/kg, subcutaneously
b. once 20 U, subcutaneously
c. 0.1 U/kg, intravenous drip
d. 0.1 U/kg, intramuscularly
e. 2 U/kg, intravenous bolus

159. A 13-year-old teenager has been suffering from diffuse toxic goiter for a year. He takes antithyroid drugs irregularly and does not consider himself ill. At the moment - a pronounced symptomatology of thyrotoxicosis. Your tactics:
a) Achieve a state of medical remission and operate
b) Operate immediately
c) Complement antithyroid therapy with levothyroxine
d) Supplement antithyroid therapy with iodine-containing drugs
e) Achieve a state of medical remission, and continue maintenance therapy

160. A 15-year-old patient suffering from type 1 diabetes mellitus since the age of 3 has a manifestation of diabetic nephropathy: edema, arterial hypertension (220/130 mm Hg). Daily diuresis - 1300 ml, blood creatinine - 680 µmol/l, urea - 18 mmol/l, total protein - 52 g/l, potassium - 6.2 mmol/l. The stage of diabetic nephropathy according to the Mogensen classification:
a) 1
b) 2
c) 3
d) 4
e) 5

161. A patient with type 1 diabetes mellitus suddenly lost consciousness. Glycemia - 1.1 mmol/l, after intravenous administration of 40% glucose solution - 8.8 mmol/l, remains unconscious. Your tactics:
a) s/c insulin therapy every 2 hours
b) introduction of colloidal solutions
c) continue infusion of 40% glucose solution
d) administration of glucocorticoids
e) introduction of plasma-substituting solutions

162. A 14-year-old girl with furunculosis. Body mass index 36 kg/m2. Fasting glycemia 5.9 and 5.6 mmol/l, triglyceride level in the blood - 2.2 mmol/l. What research needs to be done?
a) test with insulin
b) repeat fasting glucose test
c) oral glucose tolerance test
d) urine glucose test
e) oral insulin tolerance test

163. A 15-year-old patient E. with type 1 diabetes mellitus receives insulin according to the basal-bolus regimen. BMI - 28kg / m2. Postprandial hyperglycemia is noted. Your tactics:
a) increase the dose of extended insulin in the morning
b) increase the dose of extended insulin at bedtime
c) increase the dose of short-acting insulin
d) reduce the amount of carbohydrate foods in the diet
e) reduce the dose of short insulin and increase the dose of extended insulin

164. A 13-year-old tall boy has an isolated growth of the right lower limb. MRI showed no pituitary adenoma. STG levels and IRF-1 in the blood is normal. You are assuming:
a) Acromegaly
b) Gigantism
c) Nanism
d) Partial gigantism
e) Tall stature

165. A 9-year-old boy has primary acquired hypogonadism. Name the age at which it is advisable to start replacement therapy with male sex hormones:
a) 9 years
b) 10-12
c) 13-14
d) 14-15
e) 15-17

166. Glycemia of 9.3 mmol/L was accidentally detected in a 15-year-old boy. Your actions:
a) performing an oral glucose tolerance test
b) determination of fasting glycemia, twice
c) re-determination of fasting glycemia after 2 weeks of dieting
d) determination of glycemia 2 hours after eating
e) re-determination of glycemia before bedtime

167. A child with diffuse toxic goiter receives mercasolil 30 mg, anaprilin 100 mg. BP 80/60 mmHg, darkening of the skin. Your tactics:
a) reduce the dose of anaprilin
b) reduce the dose of anaprilin, increase the dose of Mercazolil
c) add prednisolone 90 mg
d) add prednisolone 10-15 mg
e) reduce the dose of mercazolil

168. A 10-year-old girl has a diffuse enlargement of the thyroid gland of the 2nd degree, the function is not impaired. On ultrasound, the structure of the gland is homogeneous. The level of ATkTPO, TSH is normal. You assume:
a) diffuse enlargement of the thyroid gland 2 degrees
b) diffuse enlargement of the thyroid gland 1 degree
c) autoimmune thyroiditis, goiter of the 2nd degree, euthyroidism
d) endemic goiter 2 degree, euthyroidism
e) juvenile struma 2nd degree

169. A 14-year-old boy with visceral obesity and arterial hypertension. The mother has type 2 diabetes. Oral glucose tolerance test: fasting glycemia - 5.6 mmol/l, 2 hours after exercise - 7.0 mmol/l. The patient has:
a) fasting glucose disorder
b) type 2 diabetes
c) type 1 diabetes
d) impaired insulin tolerance
e) impaired glucose tolerance

170. A 13-year-old girl has diffuse toxic goiter of the 2nd degree, hyperthyroidism of moderate severity, endocrine ophthalmopathy of the 2nd degree. Appointed Mercazolil 10 mg 3 times a day. Thyrotoxicosis is subcompensated, eye symptoms persist. Your tactics:
a) add prednisolone at a dose of 1 mg/kg/day to treatment
b) continue mercazolil monotherapy
c) add anaprilin to treatment
d) add prednisolone at a dose of 10-20 mg / day to the treatment
e) add prednisolone at a dose of 90 mg/day to treatment

171. Girl 11 years old. At the age of 8, the growth of the mammary glands began, sexual hair appeared. From the age of 10 - regular menstruation. Growth is low, corresponds to 10 years, bone age - 15-16 years. Sexual development - IV Art. by Tanner. Pink striae on the buttocks, hyperpigmentation in the elbows and underarms. You assume:
a) precocious puberty
b) hypothalamic syndrome
c) hypothalamic syndrome of puberty
d) hypothalamic syndrome of puberty. Accelerated sexual development
e) hypothalamic syndrome: delayed sexual development

172. The level of glycemia, at which intravenous administration of glucose is necessary when removing patients from a diabetic coma:
a) 24 mmol/l
b) less than 14 mmol/l
c) more than 14 mmol/l
d) 15-18 mmol/l
e) more than 18 mmol/l

173. A 7-year-old boy has severe thirst and polyuria, general weakness, decreased appetite. On examination: fasting glycemia - 3.5 mmol/l, 2 hours after glucose load - 4.5 mmol/l. Acetone is absent in the urine. Daily diuresis -3000 ml. The specific gravity of urine in the Zimnitsky sample is 1000-1002. Your estimated diagnosis:
a) renal glucosuria
b) type 1 diabetes
c) type 2 diabetes
d) impaired carbohydrate tolerance
e) diabetes insipidus

174. A 5-year-old child was diagnosed with endemic goiter of the 1st degree, euthyroidism. Assign treatment:
a) taking iodine preparations at 200 mcg/day, for life
b) taking iodine preparations at 100 mcg / day for 1 month
c) taking iodine preparations for 3 months at 100 mcg / day, followed by an assessment of the condition
d) levothyroxine therapy
e) taking iodine preparations for 3 months at 50 mcg / day, followed by a decision on further tactics

175. A single right testicle is determined in a 7-year-old child from birth. The left one could not be detected by any imaging methods. You assume:
a) left-sided cryptorchidism
b) Anorchism
c) hypogonadism
d) right-sided cryptorchidism
e) Monorchism

176. Preparations for the treatment of cerebral-pituitary dwarfism:
a) genotropin, norditropin
b) prednisone, cortinef

c) glucophage, urvosan
d) humalog, lantus
e) actrapid, humatrope

177. A child with type 1 diabetes has been diagnosed with stable microalbuminuria (3rd stage of diabetic nephropathy). He is shown
a) ACE inhibitors
b) Diuretics
c) infusion of protein blood substitutes
d) chronic hemodialysis
e) blockers

178. A child has thirst, polyuria, signs of dehydration. Glycemia at all hours does not exceed the norm, urine reaction to acetone and glucose is negative. The specific gravity of urine during the day is 1000.0 - 1007.0. Determine the current state:
a) chronic renal failure
b) chronic adrenal insufficiency
c) diabetic nephropathy
d) diabetes
e) diabetes insipidus

179. A newborn boy has lethargy, thirst, muscular hypotension, vomiting "fountain", diarrhea, signs of dehydration. On examination, there is hyperpigmentation of the rim of the lips, nipples, and scrotum. On examination: hyponatremia, hyperkalemia, high pointed P wave on ECG. Your presumptive diagnosis:
a) salt-wasting form of adrenogenital syndrome
b) vegetovascular dystonia
c) cerebral-pituitary dwarfism
d) intestinal infection
e) pyloric stenosis

180. Patient 13 years old. Suffering from type 1 diabetes. Constantly decompensated. Growth is low, weight is excessive, there are no secondary sexual characteristics, the liver is enlarged. Glycemia during the day 14.0 - 22.0 mmol / l. Receives insulin at a dose of 1.4 U/kg/day. The father suffers from type 2 diabetes. Cause of chronic decompensation of diabetes:
a) insufficient dose of insulin
b) insulin overdose
c) influence of unfavorable heredity on diabetes
d) puberty
e) delayed puberty

181. A 13-year-old girl has stunted growth since the age of 3 (growth rates do not exceed 2-3 cm per year). The physique is proportional. Height is 120 cm. Bone age corresponds to 7 years. Sex chromatin is positive. The levels of STH, TSH, gonadotropic and sex hormones in the blood are reduced. You assume:
a) primordial nanism
b) Shereshevsky-Turner syndrome
c) Panhypopituitarism
c) constitutional delay in puberty
d) congenital hypothyroidism

182. A 5-year-old boy with right-sided inguinal cryptorchidism is worried about pain in the area of a retained testicle. Your tactics:
a) Immediate surgery
b) Human chorionic gonadotropin therapy
c) Androgen drug therapy
d) Glucocorticoid therapy
e) Anabolic steroid therapy

183. All statements regarding thyroid storm are true except for the following:
a) Surgery and infections can trigger a thyroid storm
b) The development of the crisis is associated with a sudden sharp rise in the level of thyroid hormones in the blood.
c) In a thyrotoxic crisis, the administration of radioactive iodine is effective.
d) In the treatment of a crisis, it is advisable to use beta-blockers
e) crisis therapy, it is advisable to use inorganic iodine preparations

184. In chronic adrenal insufficiency (Addison's disease), there is
a) hand tremor
b) convulsions
c) increased appetite
d) skin hyperpigmentation
e) yellowness of the skin

185. The use of Mercazolil, propranolol and prednisolone is indicated:
a) with diffuse toxic goiter III degree of severe form
b) with hypothyroidism
c) with euthyroid enlargement of the thyroid gland III degree, vegetovascular dystonia
d) with diabetes
e) a and b

185. Diagnostic criteria for DM (diabetes mellitus) (ISPAD 2018)
A) Easting glucose > 7mmol/l, glucose after load > 11.1mmol/l, HbA1c > 6.5%
B) Easting glucose > 6 mmol/l, glucose after load > 10 mmol/l, HbA1c > 6%
C) Easting glucose > 8 mmol/l, glucose after load > 12 mmol/l, HbA1c > 7%
D) Easting glucose > 9 mmol/l, glucose after load > 13 mmol/l, HbA1c > 8%
E) Easting glucose > 5 mmol/l, glucose after load > 10 mmol/l, HbA1c > 5%

186. DM (diabetes mellitus) differ from renal glucosuria by
A) Level of urine glucose
B) Level of blood glucose
C) Level of Hb
D) Level of leucocytes
E) Level of platelets

187. Obesity is more characteristically for DM
A) Type 1
B) Type 2
C) Type 3
D) Type 4
E) Type 1 and 2

188. Type 1 DM differ from type 2 DM by
A) Level of urine glucose
B) Level of blood glucose
C) Level of blood C-peptid
D) Level of cholesterol
E) Level of HCO3

189. Tipical sings of I type DM in children are
A) Polyuria, polydipsia, lost of weight
B) Oliguria, polydipsia, lost of weight
C) Oliguria, polydipsia, obesity
D) Polyuria, polydipsia, obesity
E) Polyuria, absents of polydipsia, lost of weight

190. If the patient with type 1 of DM have headache, stomachache, vomiting we think about
A) High level of blood glucose
B) Infection
C) Low level of blood glucose
D) Ketoacidosis
E) Hyponatremia

191. Parameter which controls the compensation of DM for previous 3 months
A) Level of glucose
B) PH
C) Level of cholesterol
D) Level of Hb A1c
E) Level of Na

192. Parameter which shows compensated or decompensated ketoacidosis
A) BE
B) PH
C) pO2
D) pCO2
E) HCO3

193. Osmolality of blood in children with type 1 DM is
A) 300 mosm/l
B) 200 mosm/l
C) 150 mosm/l
D) 100 mosm/l
E) 400 mosm/l

194. «Honeymoon» in children with type 1 DM means
A) Remission of type 1 IDM after beginning of insulin therapy
B) Remission of type 1 IDM before insulin therapy
C) Remission of type 1 IDM after 2 month of insulin therapy
D) Remission of type 1 IDM after 6 months of insulin therapy
E) Remission of type 1 IDM after 1 year of insulin therapy

195. Dosage of insulin in children with type 1 DM during first 6 months is
A) 0.1 u/kg/day
B) 0.5 u/kg/day
C) 1.0 u/kg/day
D) 1.5 u/kg/day
E) 3 u/kg/day

196. Dosage of insulin in children with type 1 DM and ketoacidosis is
A) 0.1 u/kg/day
B) 0.5 u/kg/day
C) 1.0 u/kg/day
D) 1.5 u/kg/day
E) 3 u/kg/day

197. Dosage of insulin in children with type 1 DM in puberty is
A) 0.1 u/kg/day
B) 0.5 u/kg/day
C) 1.0 u/kg/day
D) 1.5 u/kg/day
E) 3 u/kg/day

198. The treatment of children with type 1 DM begins with
A) Ultra-short insulin
B) Average insulin
C) Long-acting insulin
D) Base-bolus insulin
E) Ultra-short and average insulin

199. Base-bolus insulin therapy means
A) Ultra-short insulin
B) Average insulin
C) Long-acting insulin
D) Ultra-short + long-acting insulin
E) Ultra-short and average insulin

200. Type 2 DM more characteristically for
A) Children 1-3 years C) Children 10-12 years E) Children 16-18 years
B) Children 5-7 years D) Children 13-15 years

201. In compensated stage of type 1 DM the level of Hb A1c maximum is
A) 5% C) 7% E) 9%
B) 6% D) 8%

202. 1 unit of insulin assimilates
A) 1-2 bread units C) 5-6 bread units E) 9-10 bread units
B) 3-4 bread units D) 7-8 bread units

203. Type of coma which is not characteristically in children with type 1 DM
A) Ketoacidotic C) Hyperosmolar E) Liver' s
B) Hypoglycemic D) Lactic acidosis

204. Kussmaul's dyspnea appeared in
A) Hyperglycemia B) Ketoacidosis C) Hypoglycemia
D) Hypernatremia E) Hyponatremia

205. What change is in ECG in patients with potassium deficiency?
A) Tachycardia C) Decrease of T wave E) Increase of QT interval
B) Bradycardia D) Increase of T wave
206. In children with ketoacidosis we should evaluate blood glucose every
A) 30 min C) 2 hours E) 5 hours
B) 1 hour D) 3 hours
207. If HCO3 = 15 mmol/l, PH = 7,2 degree of ketoacidosis is
A) No ketoacidosis C) Moderate E) Very severe
B) Mild D) Severe
208. If HCO3 = 8 mmol/l, PH = 7,1 degree of ketoacidosis is
A) No ketoacidosis C) Moderate E) Very severe
B) Mild D) Severe
209. Optimal (safe) level of blood glucose in children with diabetic ketoacidosis is
A) 20 mmol/l C) 10 mmol/l E) 5 mmol/l
B) 14 mmol/l D) 8 mmol/l
210. Which complication may be in children with diabetic ketoacidosis during quick i/v administration of 0.9% NaCl?
A) Edema of low extremities C) Cerebral edema E) Heart edema
B) Ascites D) Lung edema
211. What does formula for calculate of osmolarity include
A) Na and glucose C) P and glucose E) J and glucose
B) K and glucose D) Ca and glucose
212. We finish i/v fluid administration in children with diabetic ketoacidosis when
A) Level of glucose decreased to 10 mmol/l D) Level of osmolarity decreased to 350 mosmol/l
B) Level of K increased to 5.5 mmol/l
C) Level of PH increased to 7.3 E) Level of creatinine decreased to 1.0 mg/dl
213. For the treatment of brain edema used
A) Insulin C) 0.9% NaCl E) 10% glucose
B) Lasix D) 5% glucose
214. Hyperosmolaric coma developing when patient with type1 DM has
A) Severe ketosis C) Severe hyperglycemia E) Severe hypoglycemia
B) Severe acidosis D) Severe hypernatremia
215. The treatment of mild or moderate hypoglycemia includes
A) Glucose orally (bread, juice, sugar) D) Glucose 20% i/v
B) Glucose 5% i/v E) Glucose 40% i/v
C) Glucose 10% i/v
216. The treatment of severe hypoglycemia includes
A) Glucose orally (bread, juice, sugar) D) Glucose 20% i/v
B) Glucose 5% i/v E) Glucose 40% i/v
C) Glucose 10% i/v
217. Which medicine help to increase blood glucose in children with hypoglycemia
A) Vit B C) 4% KCl E) Lasix
B) Vit C D) Glucagon
218. Function of parathyroid hormone is
A) Regulation of Ca, P exchange D) Regulation of vit. A exchange
B) Regulation of K, Na exchange E) Regulation of vit. B exchange
C) Regulation of J exchange
219. The enzyme which involved in bone mineralization is
A) Carbohydrase C) 11-Hydroxilase E) Glucose 6- phosphate dehydrogenase
B) Alkaline phosphatase D) 21-Hydroxilase
220. The main sign of hypoparathyroidism is
A) Seizures C) Tachycardia E) Decrease BP
B) Muscles hypotonia D) Bradycardia
221. Laboratory changes in children with hypoparathyroidism
A) < Ca, > P C) > Ca, < P E) Normal Ca, > P
B) < Ca, < P D) > Ca, > P
223. Syndrome Di George means
A) Transient neonatal hypoparathyroidism D) Agenesia of parathyroid glands
B) Insensitivity to parathyroid hormone E) Pseudohypoparathyroidism
C) Primary immunodeficiency
224. Change on ECG in patients with hypoparathyroidism
A) Shortening QT interval C) No changers E) Lengthening PQ interval
B) Lengthening QT interval D) Shortening PQ interval
225. What vitamin is used for treatment of hypoparathyroidism?
A) A C) C E) E
B) B D) D
226. The most common reason of primary hyperparathyroidism is
A) Hyperplasia or adenoma of parathyroid glands C) Familial hyperparathyroidism
D) Multiple endocrine neoplasia type I
B) Hypoplasia of parathyroid glands E) Multiple endocrine neoplasia type II
227. Medicine that inhibits bone resorption
A) Bisphosphonate C) Glucocorticoid E) Calcitonin
B) Vitamin D D) Ca-mimetic
228. Reason of secondary hyperparathyroidism is
A) Respiratory failure C) liver failure E) Syndrome malabsorption
B) Heart failure D) Renal failure
229. Production of parathyroid hormone is stimulated by
A) > Ca in blood C) < P in blood E) < vit D in blood
B) < Ca in blood D) > vit D in blood
230. Somatotropic hormone (GH) is synthesized by
A) Hypothalamus C) Thyroid gland E) Parathyroid glands
B) Pituitary gland D) Adrenal glands
231. The children with congenital hypopituitarism have more often the deficiency of
A) Luteinizing hormone D) Thyroid-stimulating hormone
B) Follicle – stimulating hormone E) Adrenocorticotropic hormone
C) Somatotropic hormone (GH)
232. Hight of children with congenital growth hormone (GH) deficiency is
A) Between 25-75 percentiles D) < 3 percentile
B) Between 10- 25 percentiles E) > 75 percentile
C) Between 3-10 percentiles
233. Bone age of children normally
A) Equal to passport /± 1 y D) Equal to passport /± 4 y
B) Equal to passport /± 2 y E) Equal to passport /± 5 y
C) Equal to passport /± 3 y

234. More common reason of retardation growth in children is
A) Constitutional
B) Chromosomal abnormalities
C) Hypothyroidism
D) Growth hormone deficiency
E) Chronic diseases

235. Congenital growth hormone deficiency differ from hypothyroidism by
A) Hight of child
B) Normal mental development
C) Delay mental development
D) Present of dry skin
E) Present of constipation

236. Excess of what hormone there is more often in children with hyperpituitarism
A) Growth hormone
B) Somatotropin- realizing hormone
C) Antidiuretic hormone
D) Thyroid hormone
E) Cortisol

237. Synthesis of antidiuretic hormone depends on
A) Blood PH
B) Blood electrolytes
C) Blood osmolality
D) Blood lipids
E) Blood proteins

238. Diabetes insipidus differ from DM type 1
A) Polyuria
B) Thirst
C) Osmolality of blood
D) Osmolality of urine
E) Dry skin

239. Central diabetes insipidus differ from nephrogenic diabetes by
A) Polyuria
B) Thirst
C) Osmolality of blood
D) Osmolality of urine
E) Good effect of vasopressin

240. The most common symptom of hypopituitarism in children is
A) Delated puberty
B) Growth retardation
C) Decreased BP
D) Delated mental development
E) Constipation

241. In children with diabetes insipidus osmolality is
A) Blood <, urine <
B) Blood >, urine <
C) Blood <, urine >
D) Blood >, urine >
E) Blood >, urine normal

242. The indication for discontinuation of growth hormone therapy is
A) Begins of puberty
B) Closed of growth zones
C) Norm of blood growth hormone
D) Absence of puberty
E) Growth spurt at puberty

243. To identify anomalies of hypothalamus and pituitary gland is used
A) Ultrasound examination
B) CT of brain
C) MRI of brain
D) X-ray of brain
E) EEG

244. Hormones in Itsenko-Cushing's disease
A) >Adrenocorticotropic hormone,< Gonadotropic hormone,< Growth hormone
B) < Adrenocorticotropic hormone, < Gonadotropic hormone, < Growth hormone
C) > Adrenocorticotropic hormone, > Gonadotropic hormone, > Growth hormone
D) < Adrenocorticotropic hormone, > Gonadotropic hormone, > Growth hormone
E) > Adrenocorticotropic hormone, < Gonadotropic hormone, > Growth hormone

245. Diabetes insipidus has the change of hormone
A) Growth hormone
B) Antidiuretic hormone
C) Adrenocorticotropic hormone
D) Gonadotropic hormone
E) Thyroid-stimulating hormone

246. The 5-month's child with the complaints of subfibrile fever, inefficient tussis, dyspnea is hospitalized. He was ill 3 days ago after a contact with ill on virus sister. Objectively: the condition is very severe, skin is cyanotic, considerable expiration dyspnea, oral crepitation. Percussion: sound boxes. Auscultation: prolonged expiratory, scattered whistling sounds, RR 80 per 1 minute. What disease is possible?
a. Bronchial asthma
b. Aspiration of a foreign body
c. Acute bronchitis
d. Bronchiolitis
e. Acute pneumonia

247. 12-month old child after contact with cat has a frequent paroxysmal, irritative, nonproductive cough. The child has short breathing, he tries to breathe more deeply and the expiratory phase becomes prolonged and is accompanied by an audible wheezing. His lips are cyanotic, cyanosis observed in the nail beds and skin, especially around the mouth. The child is restless and anxious. Sweating is pronounced as the attack progresses. In history: allergy on food products. Put your diagnosis.
a. Acute pneumonia
b. Respiratory virus infection
c. Bronchial asthma
d. Obstructive bronchitis
e. Bronhiolitis

248. The child of 10 years – diagnose bronchial asthma during 5 yrs. Attack periods appear in summer during flowering. In period between attacks the child needs such treatment:
a. Antiinflamation
b. Antibacterial
c. Broncholitical
d. Mucolitical
e. Inhaled corticosteroids

249. The child of 10 years – diagnose bronchial asthma during 5 years. Duration of an attack period is more than 6 hours. It is necessary to prescribe:
a. Prednizolon
b. Adrenalin
c. Intal
d. Suprastin
e. Efedrin

250. 1.5 years old child is sick the second day. Body temperature is 37.8°C, restless, barking cough, hoarse voice, noisy breathing, stridor, pallor of skin, retraction at rest. Put diagnosis.
a. Pneumonia
b. Laryngitis
c. Bronchiolitis
d. Foreign body aspiration
e. Bronchial asthma

251. A child 10 months was entered to the hospital in severe condition with expiratory shortness of breath, dry cough, the temperature 38°C. At percussion over lungs there is tympanic sound. Auscultation reveals prolonged expiration, many dry wheezing and occasional wet rales on both sides. What is your diagnosis?
a. Bronchial asthma
b. Pneumonia
c. Acute obstructive bronchitis
d. Pertussis
e. Acute bronchitis

252. A child is 11 months. He is ill ARI. On the second day it was marked the emergence of a barking cough, hoarse voice, strdor, breath difficulties, shortness of breath, cyanosis. In what department is hospitalized child?
a. Pulmonary
b. Infectious
c. Junior childhood
d. Otolaryngology
e. Intensive care unit

253. The child 5 years was admitted to the hospital with rapid breathing disorders. Skin is pale, acrocyanosis, stenotic breathing, breathing with participation of auxiliary muscles, retractions at rest, hoarse voice. He has contact with ill ARI person. Your diagnosis is:
A. Laryngotracheitis
B. Laryngeal papillomatosis
C. Bronchitis
D. Foreign body of larynx
E. Foreign body of trachea

254. A 5 year old boy was hospitalized with a preliminary diagnosis of chronic disease of lungs. He is ill during 4 years. There is a constant wet cough, persistent moist rales in the lower lobe of the right lung. Which of the following will prove diagnosis?
A. Biplane (two-dimensional) chest x-ray
B. Chest ultrasound
C. Bronchoscopy
D. Bronchography
E. Spirography

255. The 7 years old boy developed an asphyxic attack, expiratory wheezing and cough. In past history the child has had relapsing rhinitis and red eyes syndrome. His sister suffers with atopic dermatitis. The correct diagnosis is:
A. bronchial asthma;
B. acute bronchitis;
C. viral croup;
D. acute obstructive bronchitis;
E. pneumonia.

256. Specify an allergic disease in which tissue damage is based on anaphylactic reactions.
a) Hay fever, urticaria
b) Chronic nonspecific lung disease
c) Lyell's and Stevens-Johnson syndrome
d) Serum sickness
e) bronchial asthma;

257. Identify allergic disease as the main mechanism of which is delayed-type hypersensitivity.
a) Serum sickness
b) Contact dermatitis

c) Tuberculin reaction e) bronchial asthma,
d) Quincke's edema

258. Define the provocative allergic tests are appropriate for allergic contact dermatitis
a) Inhalation c) Conjunctival e) Intradermal
b) Intranasal d) Application

259. Find a characteristic feature for the sensitization pollen allergens
a) High eosinophilia
b) Allergy most often manifests itself in the form of rhinoconjunctival syndrome
c) Allergy most often manifests itself in the form of dermatitis
d) Exacerbations are provoked by hyperventilation
e) a and b

260. In the pathochemical stage of an allergic reaction occurs
a) Synthesis of antibodies, c) The accumulation of plasma cells,
b) The formation of mediators and their exit d) All of the above is true.
from cells; e) a and b

261. Specify developmental changes in urticarial
a) The lesion of the subcutaneous layer of the dermis
b) The lesion of the submucosal layer of the dermis
c) The lesion of the subcutaneous tissue
d) Lesion in the connective tissue of the internal organs
e) Increased microvascular permeability

262. Specify the time of occurrence rash in acute allergic urticaria after contact with an allergen
a) Few seconds c) Few days e) Few hours
b) Few minutes d) Few weeks

263. Base symptomatic treatment of urticaria consists in the application of:
a) Antibacterial drugs d) Desintoxication drugs
b) Anti-inflammatory drugs e) Sedatives
c) Antihystamines

264. Specify the frequent systemic pathology in children with chronic urticarial
a) Cardiovascular c) Nervous system e) Digestive
b) Respiratory system d) Locomotor

265. When skin process mostly disappears in children's eczema?
a) Up to 1 year c) Up to 3 years e) Up to 2 years
b) Up to 5 years d) Up to 4 years

266. In atopic dermatitis exudative skin lesions are typical to the next age group
a) 2-4 years c) 6-8 years e) Before 2 years
b) 4-6 years d) 8-15

267. In atopic dermatitis erythematous-squamous skin lesions aretypical to the next age group
a) 0-3 months c) 9-18 months e) 12-24 months
b) 3-9 months d) 2-15 years

269. First place among the concomitant disease in atopic dermatitis belongs to the diseases of:
a) Nervous system c) Endocrine system e) Urinary System
b) Respiratory system d) Digestive system

270. Dust mites are a common trigger for indoor respiratory allergies. Where are you most likely to find them in the home?
a) Carpet c) Drapes e) Foods
b) Beds d) All of the above

271. Diagnosis of atopic dermatitis does not include:
a) Collection of allergological anamnesis d) Keeping a food diary
b) Physical examination e) Spirogram
c) Specific allergy diagnostics

272. Temperature reaction in typical allergic processes in children:
a) Usually absent c) Observed sometimes e) C and d
b) Celebrated constantly d) Subfebrile

273. Inviduals suffering from inhalant allergies may also react to cross- reacting food allergens. A person suffering from a natural latex allergy might not react to one of the following allergens
a) Avocado b) Mango c) Peach
d) Figs e) C and d

274. Although theoretically any food protein could act as a food allergen, there are eight major food allergens in Europe and North America which account for most of the allergic triggers observed in childhood. Which of the allergens pairings contains an allergen, which is not part of the group of eight major allergens?
a) Cow's milk, egg d) Fish, shellfish
b) Mustard seeds, lamb, e) A and b
c) Soy, peanuts

275. Pediatrician was called to the 2-years old child who's mother complaints of a subfebrile temperature, rhinitis, dry cough. He is ill for 3 days. During percussion: a clear pulmonary sound without dullness. During auscultation\: puerile breathing. Laboratory findings: leukopenia, lymphocytosis, increased ESR. What disease is possible first of all?
a) Acute obstructive bronchitis d) Acute bronchitis
b) Acute bronchopneumonia e) Acute tracheitis
c) Resedive bronchitis

276. Anaphylactic shock is
a) An allergic reaction to taking a drug d) New-onset hypersensitivity reaction
b) Life-threatening hypersensitivity reaction e) Any hypersensitivity reaction
c) Adverse reaction to drug administration

277. Spirometry is a helpful objective measure of airflow limitation; it depends on patient's ability to properly perform a full, forceful, and prolonged expiratory maneuver. Spirometry usually feasible in children
a) ≥4 yr of age c) ≥8 yr of age e) ≥12 yr of age
b) ≥6 yr of age d) ≥10 yr of age

278. The most vital initial treatment in the management of severe asthma exacerbations is
a) supplemental oxygen d) inhaled ipratropium
b) inhaled β -agonist e) intramuscular injection of β-agonist
c) intramuscular injection of epinephrine

279. The best "rescue" medication in the treatment of acute asthma symptoms is
a) oral SABA d) inhaled ipratropium
b) inhaled SABA e) inhaled corticosteroid
c) oral corticosteroid

280. The best treatment option for step -6- severe persistent asthma in a 6-year-old boy is
a) medium dose inhaled corticosteroids with long acting B-agonists
b) high dose inhaled corticosteroids with leukotriene receptor antagonist
c) low dose inhaled corticosteroids with leukotriene receptor antagonist
d) high dose inhaled corticosteroids with long acting B-agonist and oral corticosteroids
e) high dose inhaled corticosteroids with long acting B-agonist and oral corticosteroidsalong with omalizumab therapy

281. Bronchodilator response to an inhaled β-agonist (e.g., albuterol) is greater in asthmatic patients than nonasthmatic persons, the rate of improvement in FEV1 consistent with asthma is
a) ≥10% c) ≥14% e) ≥18%
b) ≥12% d) ≥16%

282. In emergency department, the patient may be discharged to home if there is symptomatic improvement, normal physical findings, PEF >70% of predicted or personal best, and oxygen saturation >92% in room air for 4hr. Of the following, the MOST likely discharge medication used is
a) Inhaled β-agonist only d) Inhaled β-agonist plus oral corticosteroid
b) Oral corticosteroid only e) Oral β-agonist plus inhaled corticosteroid
c) Inhaled corticosteroid only

283. The cardinal feature of atopic dermatitis is
a) Skin rash c) Fibrotic papules e) Dry skin
b) Lichenification d) Intense pruritus

284. One of the following statements is TRUE regarding skin tests in identifying food allergies in patients with atopic dermatitis
a) Negative skin and blood test results for allergen-specific ige have a low predictive value for excluding suspected allergens

b) Positive results of skin or blood tests using foods often correlate with clinical symptoms and no need to be confirmed with controlled food challenges
c) Extensive elimination diets are commonly required
d) Even with multiple majority of patients react to more than 3 foods
e) Potential allergens can be identified by a careful history and performing selective skin prick tests or in vitro blood testing for allergen- specific ige

285. Chronic urticaria may be caused by
a) Latex b) Peanut c) Iv immunoglobulin
d) Streptococcal pharyngitis e) systemic lupus erythematosus

286. Find out the percussion sound during bronchial asthma attack
a) Expansion of the heart borders d) Box sound over the lungs
b) Clear lung sound e) Dull sound over the lungs
c) Mosaic changes

287. An asthmatic status means asthma attack duration:
a) For 24 hours d) More than 6 hours
b) More than 5 hours e) More than 2 hours
c) More than 10 hours

288. The most effective and appropriate for a child with chronic allergic rhinitis and nasal stuffiness is:
a) Intranasal antihistamine d) Oral antihistamine
b) Intranasal corticosteroid e) Oral corticosteroid
c) Intranasal decongestant

289. Give the definition of atopy:
a) Hypersensitivity state, which proceeds according to type I of immunopathological reactions
b) Hypersensitivity condition, which proceeds according to type II immunopathological reactions
c) A state of hypersensitivity, which proceeds according to the III type of munopathological reactions
d) State of hypersensitivity, which proceeds according to type IV of mnopiopatologicheskie reactions
e) Hyposensitivity state, which proceeds according to type I of immunopathological reactions

290. Determination of allergen elimination:
a) Drug therapy of allergic diseases
b) Carrying out allergen immunotherapy
c) Measures to reduce contact with cause-significant exogenous allergens
d) Immunomodulatory therapy
e) Determination of the concentration of house dust mite allergens in the home

291. Indicate the complications that are not observed in Layel syndrome:
a) Pneumonia; d) Purulent infection of the skin and mucous
b) Renal failure; membranes;
c) Liver failure; e) Purulent otitis, sinusitis.

292. "A 3-year-old boy with atopic dermatitis developed perioral papular itchy rash, vesicular elements on the oral mucosa, diarrhea 2 hours after consuming a significant amount of chocolates. What pathogenetic reactions most likely underlie the development of this condition "
a. Immediate type hypersensitivity reaction
b. Delayed type hypersensitivity reaction
c. Cytotoxic reactions
d. Immunocomplex reactions
e. Pseudoallergic reactions associated with nonspecific release of histamine

293. "A 6-year-old child felt worse, had a rash on his face and torso, itchy skin, swelling in the right eye. He ate a lot of tangerines the day before. What should be given to a child first ?."
a. Prednisolone c. Antihistamines e. Enterosorbents
b. Diuretics d. Adrenaline

294. "During a specific allergy vaccination (CAB), the child developed a reaction at the site of allergen injection in the form of hyperemia with a diameter of 20 mm. Determine further treatment tactics."
a. Cancel CAB and consider it contraindicated forever
b. CAB does not cancel, but stop increasing the dose of allergen
c. Reduce the subsequent dose of allergen by 3-4ml
d. Reduce the subsequent dose of allergen by 0.1-0.3 ml
e. a and b

295. "During the specific allergy vaccination (CAB), the child developed a reaction at the site of allergen injection in the form of edema and blisters larger than 20 mm in diameter. Determine further treatment tactics "
a. Cancel CAB and consider it contraindicated forever
b. CAB does not cancel, but stop increasing the dose of allergen
c. Reduce the subsequent dose of allergen by 0.1-0.3 ml and administer this dose until a negative reaction occurs, only then increase the dose
d. Continue to administer the allergen at the threshold dose until an adverse reaction occurs, only then increase the dose
e. c and d

296. "A three-year-old child was admitted to the clinic with complaints of fever up to 39 degrees, abdominal pain, nausea, vomiting, diarrhea, polymorphic erythematous-swollen spots on the skin with blisters on the background of bright erythema, places with erosions that opened
a. Enterovirus infection d. The Arthus Phenomenon
b. Stephen-Johnson syndrome e. Lyell's syndrome
c. exudative erythema multiforme

297. "A 3-year-old child has a recurrent syndrome of groats of mixed genesis (infectious and allergic - to the smell of fish). What are the tactics of such a patient?"
a. Exclude fish dishes from the family's diet
b. To appoint as basic therapy long courses of inhaled corticosteroids and H1-antagonists of the II generation, bacterial immunostimulants, to exclude from food of a family fish dishes, to carry out allergological testing.
c. Do not assign anything
d. Prescribe long-term therapy with first-generation H1-antagonists
e. Prescribe long-term therapy with second-generation H1-antagonists
f. Conduct allergy testing and then make recommendations

298. "A 2.5-year-old boy with a family history of asthma (in the mother) and a child with atopic dermatitis had 6 episodes of wheezing during the last year: 4 with SARS and 2 with running and contact with a cat. What is the diagnosis of this patient and what are the medication tactics: "
a. Diagnosis - recurrent obstructive bronchitis, therapy - hardening, a course of immunostimulants
b. Diagnosis - recurrent stenotic laryngotracheitis, 10-day course of H1-antagonists
c. Diagnosis - bronchial asthma, therapy - inhaled corticosteroids in low doses for 3 months
d. Diagnosis of SARS with obstructive syndrome, 7-day course of suprastin, aflubin

299. "A 1.5-year-old boy born by caesarean section with a body weight of 4.5 kg, prone to vomiting, vomiting and constipation, 10 times in the past year there were episodes of obstructive bronchitis. The child has manifestations of eczema. Family history burdened by allergies (Both parents have hay fever.) What disease should be suspected and what examination recommendations should be provided: "
a. Recurrent obstructive bronchitis, chest radiography, coprogram, fecal analysis for dysbacteriosis
b. Bronchial asthma, gastro-oesophageal reflux, immunological examination, blood test for general and specific IgE, review the child's diet, fibroesophagogastroduodenoscopy
c. Pulmonary hypoplasia, chest cell radiography, diagnostic bronchoscopy
d. Cystic fibrosis, chest X-ray, coprogram, sweat test

300. "A 9-year-old boy was first diagnosed with bronchial asthma, moderate persistent and for the first time prescribed basic therapy with flexotide at a dose of 100 mcg twice a day with a metered-dose aerosol inhaler. For 1 month the child had night and day symptoms 3-4 times a day. What was your first tactic in this situation before increasing the level of therapy to correct the treatment? "
a. To reassess the severity of asthma in a patient
b. Evaluate treatment compliance
c. View the diary of individual peak flowmetry
d. Check the quality of the inhalation technique and the patient's ability to use the inhaler correctly
e. Conducting infusion therapy with systemic glucocorticosteroids