**APPROVED**

**Dean of Faculty of Medicine 2**

**SMPhU „Nicolae Testemiţanu”**

**Mr. Betiu Mircea,**

**PhD, associate professor**

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**State Exam Questions Faculty of Medicine, Department of Pediatrics,**

**academic year 2015-2016**

**Healthy child**

1. Child feeding and nutrition. Exclusive breastfeeding: definition, advantages, methods of stimulation and support in contemporary vision. The 10 steps of successful breastfeeding.
2. Artificial and mixed feeding of infants. Food diversification in infants. Feeding and nutrition of a child after age of one year.
3. Child growth and development, definition, factors influencing these processes. Laws of growth. Assessment of physical development of the child, the clinical importance.
4. Childhood periods and their characteristic (infant, pre-preschool, preschool child, schoolchild, adolescent). Assessment of child's health, the evaluation criteria.
5. Morpho-physiological peculiarities of the nervous system in children. Factors influencing neuropsychological development of children. Clinical and laboratory methods for assessing the neurological system in different ages.
6. Assessment of neuro-psychological development in young child (first year of life, 2-3 years old). Psycho-neurological retardation.
7. Immunoprophylaxis in children. Vaccination schedule. Indications and contraindications for vaccination. Possible side effects.

**Neonatology**

1. Healthy newborn. Physical and neurological examination of the newborn. Newborn’s adaptation to extrauterine life. The bordering states of the newborn.
2. Care of healthy and ill newborn. Newborn feeding. [Newborn umbilical cord and primary skin care](http://www.ncbi.nlm.nih.gov/pubmed/19057570). Temperature control and hypothermia in newborns.
3. Newborn asphyxia. Classification, etiology, pathogenesis, and diagnosis. Complications of asphyxia. Neonatal resuscitation. Neonatal ABC reanimation.
4. Septicemia in the newborn. Definition, classification, etiology, diagnosis, treatment.
5. Haemolytic disease of the newborn. Hemolytic jaundice. Definition, etiopathogenesis, diagnosis and treatment. Rhesus Incompatibility. Definition, etiopathogenesis, diagnosis and treatment. ABO incompatibility. Definition, etiopathogenesis, diagnosis and treatment.
6. The differential diagnosis of neonatal jaundice. Contemporary methods of treatment in newborn haemolytic disease. Neonatal immune hemolytic jaundice. Definition, etiopathogenesis, diagnosis and treatment.
7. Hemorrhagic disease of the newborn , diagnosis. Differential diagnosis. Treatment.

**Nutritional disorders**

1. Deficiency Rickets. Etiology, pathogenesis, classification, clinical picture, biochemical and radiological examination, differential diagnosis, treatment, and prophylaxis.
2. Carential anemia in children. Iron deficiency anemia in infants and in children. Etiology, pathogenesis, iron metabolism, prophylaxis.
3. Iron deficiency anemia in children. Clinical picture. Positive and differential diagnosis. Treatment and prophylaxis of deficient anemia in children.
4. Infant and young child malnutrition. Etiology, pathogenesis, classification, clinical picture and laboratory tests. Dietary treatment and medication. Prophylaxis.
5. Severe acute malnutrition. Etiology. Clinical picture and laboratory tests. Therapeutic management. Dietary treatment and medication. Medical follow-up.

**Pediatric rheumatology**

1. Acute rheumatic fever in children. Etiology. Clinical signs. The diagnostic criteria. The treatment. Complications. Primary and secondary prophylaxis. Follow-up.
2. Juvenile idiopathic arthritis. Etiology. Classification criteria according ILAR 1997. Clinical and laboratory features of systemic form. The principles of treatment. Complications.
3. Juvenile idiopathic arthritis. Polyarticular and oligoarticular forms. Differential diagnosis. The principles of treatment. Prognosis.
4. Collagenosis in children. Criteria for diagnosis of systemic lupus erythematosus, juvenile dermatomyositis, systemic sclerosis (scleroderma). Etiopathogenic mechanisms. Principles of treatment. Complications.
5. Henoch-Schonlein Purpura. Etiology. Pathogenesis. Clinical picture. Positive and differential diagnosis. The principles of treatment. Complications. Medical follow-up.

**Respiratory system**

1. Acute pharyngitis in children. Definition. Etiology. Pathogenesis. Clinical picture according to etiological factor. Differential diagnosis. Treatment according to etiological factors. Prophylaxis.
2. Fever and hyperthermic syndromes in children. The etiology and pathophysiology. Clinical approach of febrile child. Treatment of fever. Febrile seizures. Classification of febrile seizures. Therapeutic management.
3. Bronchitis in children. Definition. Classification. Acute bronchitis. Etiology. Pathogenesis. Clinical picture and laboratory tests. Positive and differential diagnosis. Treatment and prophylaxis.
4. Acute obstructive bronchitis in children. Etiology. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment. Prophylaxis.
5. Acute bronchiolitis in children. Definition. Etiology. Pathogenesis. Clinical picture. Laboratory tests. Positive and differential diagnosis. Treatment. Prophylaxis.
6. Community-acquired pneumonia in children. Definition. Etiology. Pathogenesis. Clinical picture. Diagnostic criteria. Clinical features in young children. Differential diagnosis. Ttreatment. Follow-up. Prophylaxis.
7. Extrapulmonary and pulmonary complications of pneumonia in children. Positive and differential diagnosis. Principles of treatment. Indications for surgical treatment. Prophylaxis.
8. Chronic bronchitis in children. Definition. Etiology. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment. Prophylaxis. Medical follow-up.
9. Bronchiectasis. Definition. Etiology. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment. Prophylaxis. Medical follow-up.
10. Bronchopulmonary malformations. Definition. Etiology. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment. Prophylaxis. Medical follow-up.
11. Cystic fibrosis. Definition. Etiology. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment. Medical follow-up.

**Allergology and immunology**

1. Food allergy in children. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment and prophylaxis. Prognosis. Medical follow-up.
2. Atopic dermatitis. Etiology. Risk factors. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment: hypoallergenic diet, topical and systemic therapy. Prognosis. Prevention measures.
3. Bronchial asthma in children. Definition. Risk factors and trigger factors. Pathogenesis. Clinical. Assessment methods in children with asthma. Criteria for bronchial asthma diagnosis in children younger than 5 years and older than 5 years. Classification. Differential diagnosis.
4. Asthma in different ages children. "Rescue" treatment and "control" therapy of asthma. A stepwise approach to asthma management. Treatment peculiarities according to the child age. Complications of asthma in children. Specific immunotherapy. Definition. Methods of improving medical immunotherapy. Follow-up. Education of family and of child with asthma.
5. Morpho-physiological peculiarities of the immune system in children of different ages. Immune system functions. Definition of specific and non-specific defense system.
6. Immunodeficiency in children. Classification, clinical presentation, diagnosis and treatment principles.

**Digestive system**

1. Acute diarrheal disease in infants. Etiology. Clinical picture. Dehydration degrees. Positive and differential diagnosis. Principles of treatment.
2. Celiac disease. Etiology. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment. Evolution. Prophylaxis. Medical follow-up.
3. Intolerance to cow's milk protein. Primary and secondary lactase deficiency in children. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment. Prophylaxis. Medical follow-up.

**Hematology**

1. Idiopathic thrombocytopenic purpura in children. Etiology. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment. Prophylaxis. Medical follow-up.
2. Coagulopathy in children. Haemophilia. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment programs. Prophylaxis. Medical follow-up.
3. Hereditary (primary) hemolytic anemias. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment. Prophylaxis. Medical follow-up.
4. Acquired (secondary) hemolytic anemia. Etiology. Clinical picture. Positive and differential diagnosis. Treatment. Prophylaxis. Medical follow-up.
5. Aplastic anemia. Classification. Diagnostic criteria and clinical manifestations. Treatment.

**Reno-urinary system**

1. Urinary tract infection in children. Etiology. Pathogenesis. Classification. Peculiarities of pyelonephritis in young children. Positive and differential diagnosis. Treatment. Prophylaxis. Medical follow-up.
2. Acute poststreptococcal glomerulonephritis in children. Etiology. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment. Prophylaxis. Prognosis. Medical follow-up.
3. Idiopathic nephrotic syndrome in children. Etiology. Pathogenesis. Clinical picture. Positive and differential diagnosis. Treatment. Prophylaxis. Prognosis. Medical follow-up.

**Cardiovascular system**

1. Congenital heart malformations. Etiology. Risk Factors. Pathogenesis. Classification. Pathophysiological stages in the evolution of congenital heart defects. Congenital heart defects with right-to-left shunt.
2. Congenital heart malformations with left-to-right shunt (patent ductus arteriosus, atrial septal defect, ventricular septal defect, aortopulmonary septal defect, atrioventricular canal defect). Pathophysiology. Clinical manifestations. Positive and differential diagnosis. Complications. Therapeutic management. Indications for interventional treatment and surgery. Follow-up.
3. Congenital heart defects with right-to-left shunt and cardiovascular obstructive lesions (stenosis of the pulmonary artery branch and coarctation of the aorta, interrupted aortic arch, aortic stenosis) in children. Pathophysiology. Clinical manifestations. Positive and differential diagnosis.
4. Cyanotic congenital heart defects (tetralogy of Fallot, common arterial trunk, transposition of great vessels, Ebstein disease, hypoplastic left heart syndrome, total anomalous pulmonary venous drainage). Pathophysiology. Clinical manifestations. Positive and differential diagnosis. Complications. Principles of conservative treatment. Indications for surgery. Follow-up.
5. Primary cardiomyopathies in children (hypertrophic cardiomyopathy, dilated and restrictive cardiomyopathy). Etiology. Clinical manifestations. Diagnosis. The principles of treatment.
6. Viral myocarditis in children. Etiology. Risk factors. Classification. Clinical features in children of different ages. Evolution. Complications. The principles of treatment. Prophylaxis. Follow-up.
7. Supraventricular tachyarrhythmias in children. Etiology. Clinical picture and laboratory tests. Emergency treatment. The principles of treatment. Prophylaxis. Follow-up.
8. Ventricular tachycardia in children. Classification. Peculiarities of the clinical picture. Complications. Emergency treatment. The principles of treatment. Prophylaxis. Follow-up.
9. Atrioventricular block in children. Etiopathogenesis. Classification. Clinical picture and laboratory tests. Complications. The principles of treatment. Prophylaxis. Follow-up.
10. Congestive heart failure in children. Etiology. Pathophysiology. Peculiarities of the clinical picture in relation to age. The principles of treatment. Prophylaxis.

**Pediatric neurology**

1. Basic neurological syndromes in children (febrile convulsions, increased intracranial pressure, meningeal syndrome, encephalitis syndrome, epileptic syndrome, headache, comatose syndrome, vegetative syndrome, etc.).
2. Seizures and epilepsy syndromes in children. Accidental seizures. Principles of diagnosis and treatment in children (emergency care and chronic treatment).

**Discussed and approved at the meeting of Pediatric Department,**

**Protocol no. March 22, 2016**

**Head of Pediatric Department, University Professor Nineli Revenco**