

A- Pediatric propedeutic, general pediatrics, first aid and pediatrics emergencies:

1. Pediatric history
2. Physical examination in pediatrics, age-specific features
3. Neonate born preterm: classification, main characteristics of the period, common diseases
4. Healthy neonate: physical examination findings, main characteristics of the period, common diseases
5. Infant and toddler: main milestones of the period, growth and development, common diseases
6. Preschooler and young-schooler: main characteristics of the period, growth and development, common diseases
7. Adolescent: main characteristics of the period, growth and development, common diseases, HEADSS
8. Assessment of growth and development, growth charts analysis
9. Breastfeeding (composition of breast milk, comparison with artificial milk formula, importance, contraindications)
10. Nutrition of the child in infancy and toddler age, risks of alternative diets
11. Artificial milk formulas, types of formulas and their use in clinical practice
12. Basic and advanced cardiopulmonary resuscitation of neonate and child
13. Acute expiratory dyspnea – clinical manifestation, differential, therapeutic approach
14. Acute inspiratory dyspnea – clinical manifestation, differential, therapeutic approach
15. Foreign body in airways and gastrointestinal tract
16. Allergic reaction, anaphylactic shock
17. The most common intoxications in childhood and their therapy
18. Burn injury
19. Disorders of consciousness, convulsions, differential, first aid
20. Acute abdomen in pediatrics, signs and symptoms, differential, therapy
21. Oral and parenteral rehydration, realimentation
22. Specific features of pediatric pharmacotherapy

23. Vaccinations: principles and its importance, vaccination schedule, obligatory and voluntary vaccinations, adverse effects
24. Neonatal screening – clinical and laboratory
25. Preventive examination in primary pediatric care, screening in pediatrics
26. Early neonatal care, postnatal adaptation, first examination by paediatrician
27. Life-threatening congenital malformations in neonate
28. Birth traumas
29. Prenatal diagnosis and genetic tests in pediatrics, indications, methods
30. Specific features of biochemistry and hematology tests in children
31. Blood-gas and acidobasic status analyses, interpretation
32. Pneumopathies in neonates, RDS
33. Apnoe, acute life-threatening conditions in infancy (ALTE/BRUE, SIDS), differential dg
34. Shock (classification, causes, treatment)
35. Cardiac failure in children, causes, clinical manifestations, treatment
36. Respiratory failure in children, causes, clinical manifestations, treatment
37. Acute gastroenteritis in children, causes, clinical manifestations, treatment
38. Neonatal sepsis – early and late, causes, clinical manifestations, treatment

B- Special Pediatrics:

1. Epilepsy in children, febrile seizures
2. Congenital heart malformations
3. ADHD, autism
4. Disorders of adenohypophysis
5. Disorders of sexual differentiation
6. Disorders of adrenal glands
7. Deficiency of fat-soluble vitamins
8. Deficiency of water-soluble vitamins
9. Diabetes mellitus type I
10. Obesity, treatment and complications
11. Peri-, myocarditis and endocarditis in children
12. Cardiomyopathy and heart arrhythmias in children
13. Congenital malformations of respiratory tract
14. Tuberculosis in children
15. Upper respiratory tract infection, clinical manifestations and treatment
16. Acute bronchitis, acute bronchiolitis
17. Pneumonia in children
18. Cystic fibrosis
19. Asthma bronchiale
20. Congenital malformation of gastrointestinal tract
21. Gastroesophageal reflux, infant colic
22. Diseases of liver in pediatric age,
23. Diseases of gall-bladder and pancreas
24. Inflammatory bowel diseases
25. Urinary tract infections in children
26. Nephrotic syndrome

27. Acute and chronic renal failure
28. Acute glomerulonephritis, nephritic syndrome
29. Miction disorders and enuresis
30. Congenital malformations of urinary tract
31. Perinatal hypoxia and asphyxia
32. Eating disorders
33. Syndrome of risk behavior in adolescence, drug-abuse, possibilities of intervention
34. Reactive arthritis, rheumatic fever, juvenile idiopathic arthritis
35. Systemic autoimmune disorders
36. Primary systemic vasculitis
37. Congenital and acquired coagulopathies in children
38. Leukemia and lymphomas in children
39. CNS tumors in children
40. Solid tumors in children (except CNS tumors)
41. Intrauterine infections
42. Parasitic infections
43. Atopic eczema, seborrheic dermatitis
44. Intertrigo, purulent skin disorders
45. Child abuse and neglect syndrome (CAN)
48. Disorders of carbohydrate metabolism
49. Disorders of lipid metabolism
50. Disorders of amino acids metabolism
51. Lysosomal disorders

C- Differential diagnosis, investigation and treatment plan:

1. Neuroinfections, differential and treatment
2. Developmental delay, differential and treatment
3. Neuromuscular disorders, differential
4. Hypotonia of neonate and infant, differential
5. Failure to thrive in infancy and toddler age, differential
6. Abdominal pain, differential
7. Vomiting, differential
8. Diarrhea, differential
9. Stooling, constipation disorders, differential
10. Proteinuria in children, differential
11. Hematuria in children, differential
12. Polyuria, differential
13. Cough, differential
14. Hypertension, differential
15. Hypoglycemia, differential
16. Joint swelling, differential
17. Musculoskeletal pain, differential
18. Anemia, differential
19. Hyperbilirubinemia, differential and treatment
20. Hepatopathy and hepatomegaly, differential
21. Splenomegaly, differential
22. Gastrointestinal bleeding, differential
23. Immunodeficiencies, differential
24. Common childhood exanthems, differential
25. Oedemas, differential
26. Growth disorders, differential

27. Disorders of calcium-phosphate metabolism, differential
28. Thyroid gland disorders, differential
29. Premature and delayed puberty, differential
30. Lymphadenopathy, differential
32. Headache, differential
33. Heart murmurs, differential
34. Malabsorption syndromes in children, differential
35. Fever, hyperpyrexia, body temperature: definitions, therapy

Imaging methods, anatomical order:

Head

Thorax

Abdomen

Skeleton