

Topic list in Pediatric VI. year Faculty Of Medicine Semmelweis University Pediatric Center

Topic lists for the final exam in Pediatric

Differential diagnosis (I.)

1. Differential diagnosis of lymphadenomegaly
2. Abdominal tumours – different diagnosis and treatment
3. Differential diagnosis of childhood anaemias
4. Differential diagnosis of bleeding disorders and immunthrombopenia
5. Differential diagnosis of headaches in children
6. Differential diagnosis of hypertension in children
7. Differential diagnosis of obesity in children
8. Differential diagnosis of polyuria and polydipsia
9. Differential diagnosis of oedema
10. Differential diagnosis of haematuria
11. Differential diagnosis of joint pain
12. Differential diagnosis of fever of unknown origin
13. Differential diagnosis of coughing
14. Differential diagnosis of vomiting
15. Differential diagnosis of diarrhoea
16. Differential diagnosis of bloody stool
17. Differential diagnosis of hepatomegaly, splenomegaly.
18. Differential diagnosis of constipation, Hirschprung's disease
19. Differential diagnosis of sore throat
20. Differential diagnosis of acute and chronic abdominal pain
21. Unconsciousness, altered consciousness
22. Failure to thrive in infancy and childhood
23. Neonatal jaundice

General and Emergency Paediatrics (II.)

1. Oncological emergencies (tumour lysis syndrome, neutropenic fever, hyperleukocytosis, VCS syndrome)
2. Alarming signs and necessary examinations in diseases involving the CNS, eg. elevated ICP. Lumbar puncture
3. Symptoms of primary and secondary immunodeficiency
4. The nutrition of the healthy infant and child, nutrition of preterm neonates, caloric needs, nutrition therapy
5. Definition, causes and investigation of malnutrition
6. The prevention of infectious diseases, immunisation
7. Gastrointestinal obstruction in neonates (meconium ileus, pylorus stenosis, intestinal atresia)
8. Diaphragmatic hernia, lung development disorders
9. Acute abdomen in children: ileus, volvulus, invagination, appendicitis, incarcerated hernia, complications (short bowel syndrome)
10. Acute pain and antipyretic treatment (pharmacological and non-pharmacological methods)
11. Neonatal life support. APGAR score
12. Paediatric life support (2025 ERC guideline)
13. Recognition and treatment of shock, different shock types
14. Disorders of fluid balance, treatment (severe dehydration, infusion solutions)
15. Electrolyte disorders (hypo- and hypernatraemia, hypo- and hyperkalaemia)
16. Recognition and emergency treatment of acute respiratory failure
17. Emergency treatment of seizures and status epilepticus
18. Signs of intoxication in children, decontamination
19. Sudden infant death syndrome
20. Recognition and emergency treatment of sepsis and septic shock
21. Metabolic and respiratory acidosis, metabolic and respiratory alkalosis
22. Symptoms and treatment of hypoglycaemia
23. Perinatal terminology, mortality data and concepts related to gestation and birth.
24. Newborn screening, genetical screening, prevention

25. Physiological growth, anthropometry, normal development, normal values for age from newborn to school age
26. Disorders of neonatal adaptation
27. Perinatal asphyxia
28. Obstructive bronchitis, asthma
29. Epiglottitis, croup, foreign body aspiration
30. Pertussis sy, RSV, bronchiolitis
31. Causes and treatment of acute gastroenteritis
32. Fever in infants and toddlers
33. Symptoms and signs of allergy. Anaphylaxis.

Specific diseases (III.)

1. Leukaemias
2. Tumors of the central nervous system, retinoblastoma
3. Most common solid tumors in children (Neuroblastoma, Wilms-tumor, bone- and soft tissue tumors)
4. Brain injury in neonates. Neonatal seizures, Infantile cerebral palsy
5. Infectious diseases of the CNS (meningitis, encephalitis, abscess)
6. Childhood epilepsy. Febrile seizures.
7. Neuromuscular disorders
8. Eating disorders in childhood
9. Behavioural disorders in childhood (autism spectrum disorder, ADHD, tic-disorder)
10. Congenital adrenal hyperplasia
11. Growth disorders
12. Disorders of puberty, gonadal disorders
13. Congenital hypothyreosis
14. Diabetes mellitus, hyperglycaemia, diabetic ketoacidosis
15. Congenital anomalies of the urinary tract, cystic renal disorders
16. Glomerular disorders
17. Haemolytic uremic syndrome
18. Urinary tract infections
19. Acute renal failure

20. Chronic renal failure
21. Juvenile idiopathic arthritis
22. Septic arthritis, osteomyelitis
23. Pediatric SLE
24. Vasculitis in childhood
25. Pneumonia. Most common pathogens by age
26. Cystic fibrosis
27. Malabsorption (celiac disease, lactose and fructose intolerance)
28. Inflammatory bowel diseases
29. Acute liver failure, acute hepatitis
30. Neonatal infections
31. Fever with a rash in childhood
32. Mononucleosis syndrome
33. Complications of prematurity (BPD, ROP, NEC, IVH)
34. Acyanotic congenital heart diseases
35. Cyanotic congenital heart diseases
36. Disorders of the ear
37. Vitamin-D deficiency
38. Non-accidental injury in childhood
39. Staphylococcal diseases, toxic shock syndrome