

## **List of theoretical questions for preparing students for final module control**

### **Module 5. Congenital anomalies in children**

**on 2020 – 2021 year of study**

1. Etiopathogenesis of congenital malformations. The concept of norm, anomaly and flaw.
2. Embriopathogenesis of respiratory system defects. Opportunities for prenatal diagnosis.
3. Classification of birth defects of the respiratory system.
4. Clinical symptoms and syndromes in congenital respiratory tract and lung defects.
5. Methods of diagnosis of congenital defects of the respiratory system. Modern radiation and endoscopic technologies.
6. Functional airway stenoses due to congenital malformations. Laryngomalacia and tracheomalacia. Clinical picture, diagnosis, treatment.
7. Subordinated organic stenosis: congenital, postintubation, hemangioma. Clinic, diagnostics, principles of treatment.
8. Congenital tracheal stenosis (full rings). Options, clinic, diagnosis, treatment principles.
9. Compression tracheal stenoses. Anatomical variants of the vascular ring.
10. Full vascular ring: double aortic arch and right aortic arch. Clinic, diagnostics, principles of treatment.
11. Incomplete vascular ring: aberrant right subclavian artery, abdominal trunk anomalies. Clinic, diagnostics, principles of treatment.
12. Pulmonary artery loop. Options, clinic, diagnosis, treatment principles.
13. Tracheal compression stenosis in tumors and cysts of the mediastinum. Nosology variants, clinical manifestations, diagnostic methods, treatment principles.
14. Congenital isolated tracheostriacid fistula. Clinic, diagnostics, principles of treatment.
15. Congenital pulmonary emphysema. Pathogenesis, clinic, diagnosis, principles of treatment.
16. Aplasia, lung agenesis. Anatomical and pathophysiological features.
17. Lung aplasia. Pathogenesis, clinic, diagnostics, differential diagnostics, possibilities of surgical treatment.
18. Congenital lung cysts. Classification, diagnosis, complications, surgical treatment.
19. Pulmonary sequestration. Options, features of pathogenesis, clinic, diagnosis, treatment.
20. Bronchiectasis. Clinic, diagnosis, treatment.
21. Tracheostomy. Indications and contraindications. Technique of execution.
22. Classification of esophageal atresia. Opportunities for prenatal diagnosis of esophageal atresia.
23. Clinical picture of atresia of a newborn esophagus. Causes of aspiration

pneumonia in various forms of esophageal atresia.

24. Clinical picture of atresia of a newborn esophagus.

25. Diagnosis of esophageal atresia (radiography, esophageal sensing, esophagography). Causes of aspiration pneumonia in various forms of esophageal atresia.

26. VACTERL Association for esophageal atresia. Clinical manifestations, principles of diagnosis and treatment.

27. Preoperative preparation in children with esophageal atresia.

28. Choice of surgical tactics depending on the form of esophageal atresia. Gastrostomy. As a method of preparation for radical surgery for atresia of the esophagus. Radical surgery for atresia of the esophagus with lower tracheo-esophageal fistula.

29. Complications of surgical treatment of esophageal atresia (insufficiency of anastomosis sutures). Clinical manifestations, principles of diagnosis and treatment.

30. Complications of surgical treatment of esophageal atresia (recurrence of tracheo-esophageal fistula). Clinical manifestations, methods of imaging, principles of treatment.

31. Complications of surgical treatment of esophageal atresia (postoperative esophageal stenosis). Clinical manifestations, methods of diagnostics, methods of treatment.

32. Complications of surgical treatment of esophageal atresia (gastric esophageal reflux). Clinical manifestations, diagnosis, conservative and surgical treatment.

33. Tracheomalacia associated with esophageal atresia. Causes, clinical manifestations, methods of diagnosis, methods of treatment.

34. Congenital isolated tracheoesophageal fistula - a place in the classification of esophageal atresia, and its origin, clinical picture and diagnosis, treatment principles.

35. Laryngotracheotracheal cleft. Diagnosis and treatment principles.

36. Definition of "congenital diaphragmatic hernia". Classification. Mechanism of formation of defect.

37. Pulmonary hypoplasia and pulmonary hypertension in congenital diaphragmatic hernia. Causes of formation, morphological characteristics.

38. Methods of prenatal diagnosis of congenital diaphragmatic hernia. What are the possibilities of prenatal prognosis for survival of a newborn with VDH?

39. What are the clinical manifestations of congenital diaphragmatic hernia in a newborn? What diagnostic methods are used to confirm the diagnosis?

40. Assistance to a newborn with congenital diaphragmatic hernia in the delivery room. Principles of preoperative stabilization.

41. Principles of surgical treatment of VDG. Operational accesses. Ways to close the diaphragm defect.

42. Postoperative management of newborns with VDH.

43. What surgical and non-surgical complications arise after correction of congenital diaphragmatic hernia? Possibilities of their prevention.

44. Features of clinical course and modern methods of diagnosis of congenital

hypertrophic pylorostenosis.

45. Preoperative preparation, surgical treatment of congenital hypertrophic pylorostenosis. Laparoscopy capabilities.
46. Duodenal intestinal obstruction: causes, prenatal diagnosis, diagnostic algorithm in the newborn.
47. Stages of physiological intestinal rotation.
48. Classification of bowel rotation and fixation disorders.
49. Clinical manifestations of diagnostics and treatment of intestinal rotation disorders, period I.
50. Syndrome (triad) Leda. Definitions, clinical manifestations, principles of treatment.
51. Intestinal rotation disorders, period III. Types, clinical manifestations, methods of diagnosis and principles of treatment.
52. Complications of rotational anomalies, their prevention and treatment.
53. Classification of atresia of the small intestine. Pre- and postnatal diagnosis. Principles of treatment.
54. Hirschsprung's disease. Definition, anatomical forms.
55. Clinical manifestations of Hirschsprung's disease depending on the form of the course.
56. Current principles of diagnosis of Hirschsprung's disease.
57. Principles of surgical treatment of Hirschsprung's disease depending on the anatomical shape, clinical course and age of the child.
58. Intestinal dysangliosis, hypogangliosis and other disorders of intestinal motility. Clinical manifestations, possibilities of diagnostics and differential diagnostics with Hirschsprung's disease.
59. Meconial intestinal obstruction. Etiology, pathogenesis, clinical manifestations.
60. Conservative and surgical treatment of meconial intestinal obstruction.
61. Anorectal malformations in boys. Types, clinical manifestations.
62. Anorectal malformations in girls. Types, clinical manifestations.
63. Cloacal form of anorectal atresia. Classification, associated defects, clinical manifestations, complications.
64. Current principles of treatment of anorectal malformations.
65. Complications after surgical correction of anorectal malformations, their prevention. Social and medical rehabilitation.
66. Prenatal diagnosis of malformations of the anterior abdominal wall: timing of diagnosis, methods of diagnosis, biochemical markers.
67. Clinical manifestations of gastroschisis.
68. Treatment of gastroschisis.
69. Definition, classification, clinical manifestations of omphalocele. Structure of hernia membranes.
70. Methods of surgical treatment of omphalocele.
71. Associated malformations, complications, prognosis of gastroschisis and omphalocele.
72. Differential diagnosis of gastroschisis and omphalocele.
73. Causes, features of anatomic structure of inguinal hernias in children.

Principles of surgical treatment.

74. Complications of inguinal hernia in children, their prevention, treatment.

75. Umbilical hernia in children. Clinical manifestations, possible complications, principles of treatment, timing of surgery.

76. Rare forms of malformations of the anterior abdominal wall. Muscle aplasia ("plum syndrome") - clinical manifestations, concomitant defects, complications.

77. Surgical anatomy of the liver: relation to the peritoneum, ligaments of the liver, surfaces, division into quinoa segments, gates of the liver.

78. Definition, classification of choledochal cysts.

79. Clinical manifestations of choledochal cyst.

80. Methods of diagnosis of choledochal cyst.

81. Principles of surgical treatment of choledoch cysts. Rising cholangitis prevention.

82. Biliary atresia: defect definition, probable causes, classification.

83. Clinical manifestations and methods of diagnosis of biliary atresia.

84. Methods of treatment of biliary atresia. The prognosis of the disease.

85. Liver cysts: types, clinical manifestations, methods of diagnosis, indications for active surgical tactics.

86. Differential diagnosis of congenital and parasitic liver cysts.

87. What are the anomalies of the position, number and relationship of the kidneys? Their clinical manifestations, diagnosis, prognosis.

88. Cystic kidney anomalies: types, clinical manifestations, complications, principles of treatment.

89. Congenital hydronephrosis: causes, clinical manifestations.

90. Methods of diagnosis of hydronephrosis in children. Determination of kidney function.

91. Principles of surgical treatment of hydronephrosis in children.

92. Bladder-ureteric reflux in children: causes, clinical manifestations, complications, principles of treatment.

93. Bladder extrophy: clinical manifestations, complications, options for correction.

94. Epispadias: definitions, clinical manifestations, principles of treatment.

95. Hypospadias: definitions, types, clinical manifestations, principles of treatment.

96. Cryptorchidism: definition, classification, clinical manifestations, principles of treatment.

97. Phimosis: definitions, causes, complications, treatment principles. Physiological phimosis.

98. Paraphimosis. Definitions, causes, clinical manifestations, first aid.

99. Youth kyphosis: definition, classification, clinical manifestations.

100. Youth kyphosis: principles of treatment, criteria of effectiveness.

101. Congenital scoliosis: definitions, clinical manifestations, principles of treatment.

102. Idiopathic scoliosis: definitions, principles of classification.

103. Idiopathic scoliosis: principles of treatment depending on the degree of deformity.

104. Calve disease: definitions, principles of treatment.
105. Instrumental methods of research of patients with scoliosis.
106. Corsetotherapy for malformations of the spine in children.
107. Principles of surgical treatment of scoliosis in children.
108. Differential diagnosis of scoliotic posture and scoliosis.
109. What are the most common malformations of the musculoskeletal system in children?
110. What is muscle curvature?
111. What is congenital tick-bearing?
112. What are the later symptoms of congenital hip dislocation?
113. What are the early symptoms of congenital hip dislocation?
114. At what time after birth can a baby be diagnosed with congenital cliché?
115. When should conservative treatment for congenital cliché be started?
116. What is the normal acetabular angle in newborns?
117. Modern treatment of cliché?
118. What surgery is used to treat muscle curvature?
119. What type of surgery for the treatment of funnel deformities of the chest is used most often at the present stage?
120. What is a characteristic symptom of kidney fungal deformity in children do you know about?
121. What developmental vascular malformation underlies the pathogenesis of Paland syndrome?
122. What indicator is used to determine the degree of deformity in funnel deformities of the chest?
123. What are the symptoms characteristic of Marfan syndrome?
124. Optimal age for surgical treatment of LDHK?
125. To what degree of deformation does the Gizycka index of 0.48 correspond in patients with fungal deformity of the chest?
126. What is the ratio of boys to girls among LDC patients?
127. What is a normal chest excursion?
128. What are the complications of surgical treatment of chest deformities?

The Head of the Chair

associated professor



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