

DANYLO HALYTSKYI LVIV NATIONAL MEDICAL UNIVERSITY

Department of Pediatric Surgery



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**CURRICULUM OF THE DISCIPLINE
PEDIATRIC SURGERY**

Individual profile course of choice

"Obstetrics and gynecology";

"Preventive medicine";

"Internal Medicine"

training of specialists of the second (master's) level of higher education

field of knowledge 22 "Health"

specialty 222 "Medicine"

VI year of study

Approved at the meeting of pediatric
surgery protocol № 9
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Working curriculum in the discipline of "Pediatric Surgery", individual profile course of choice "Obstetrics and gynecology " for graduates of the second (master's) level, field of knowledge 22 "Health" in the specialty 222 "Medicine" composed:

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INTRODUCTION

The program of study of the discipline "Pediatric Surgery"

according to the Standard of higher education of the second (master's) level
field of knowledge 22 "Health"
specialties 222 "Medicine"
educational program of master of medicine

Course description (abstract) Pediatric surgery is one of the fundamental clinical disciplines in the system of higher medical education, the knowledge of which is necessary for the quality training of health professionals. This is due to the fact that knowledge of pediatric surgery occupies a leading position in the treatment of surgical pathology in children. In recent decades, pediatric surgery has been supplemented by new methods of diagnosis and treatment. State standards of higher medical education also stipulate that a doctor, pediatric surgeon must be able to diagnose and apply different diagnostic methods and choose the best methods of surgical treatment of various pathologies of childhood.

Knowledge of pediatric surgery will allow the future specialist to choose the optimal method for diagnosing pathology of various organs and systems and interpret the data of research methods on clinical diagnosis, evaluate the possibilities of different treatments and choose the optimal method of surgical treatment of pathology in children.

The subject of study of the discipline is: surgical diseases in children. Pediatric surgery is exploring the possibility of using methods of treatment of surgical pathology in children.

Interdisciplinary links: The study of the discipline "Pediatric Surgery" is based on knowledge of normal physiology, normal anatomy, pathological anatomy, topographic anatomy and operative surgery, microbiology, internal medicine, pediatrics, obstetrics and gynecology, endoscopy and urology, urocinology, urology resuscitation, endoscopic surgery, oncology, which students receive in parallel with the study of pediatric surgery. It involves the integration of teaching with these disciplines and the formation of skills to apply knowledge of pediatric surgery in further education and professional activities.

1. PURPOSE AND TASKS OF THE COURSE

1. Methods and aims of the discipline

1.1. The aim of the discipline "Pediatric Surgery" is to acquire theoretical and practical knowledge of etiology, pathogenesis, classification, clinical manifestations, methods of diagnosis, conservative and surgical treatment, prevention and rehabilitation of children with surgical pathology, skills of clinical, laboratory and instrumental examination of the child in compliance with medical ethics and deontology principles, the acquisition by the student professional skills in maintaining medical records.

Acquisition by the student of knowledge and professional skills in differential diagnosis of surgical diseases of children, dispensary supervision of healthy and sick children in an outpatient setting and providing emergency care during the most common emergencies in children based on knowledge of age, anatomical and physiological features of the child's body.

Formation of the ability to use knowledge, skills, abilities to solve typical problems of the doctor in health care, the scope of which is provided by certain lists of syndromes and symptoms of diseases,

emergencies, physiological conditions.

1.2. The main tasks of studying the discipline "Pediatric Surgery" are:

- to teach students to identify typical clinical syndromes and symptoms in the clinic of children's surgical diseases;
- to diagnose and provide medical assistance in case of emergency conditions in the clinic of children's surgical diseases;
- interpret the general principles of treatment, rehabilitation and prevention of the most common surgical diseases in children;
- determine the prognosis for life, health and quality of life in common surgical diseases and injuries in children;
- draw up an examination plan and interpret the results of laboratory and instrumental examination methods in children;
- demonstrate the ability to perform necessary medical manipulations;
- to provide emergency medical assistance in urgent cases in children's surgery;
- demonstrate the ability to maintain medical documentation;
- to possess the moral and deontological principles of professional subordination in children's surgery .

2. COMPETENCIES AND LEARNING OUTCOMES

In accordance with the requirements of the educational and scientific program, the discipline provides students with the following competencies and program learning outcomes:

<p>Integral competence: The ability to solve complex problems, including those of a research and innovation nature in the field of medicine. Ability to continue learning with a high degree of autonomy.</p>
<p>1. General competencies (GC):</p> <p>GC 1. Ability to abstract thinking, analysis and synthesis</p> <p>GC 2 Ability to learn and master modern knowledge</p> <p>GC 3. Ability to apply knowledge in practical situations</p> <p>GC 4. Knowledge and understanding of the subject area and understanding of the professional</p> <p>GC 5. Ability to adapt and act in a new situation</p> <p>GC 6. Ability to make informed decisions</p> <p>GC 7. Ability to work in a team</p> <p>GC 8. Ability to interpersonal interaction.</p> <p>GC 10. Ability to use information and communication technologies.</p> <p>GC 11 Ability to search, process and analyze information from various sources.</p> <p>GC 12. Definiteness and perseverance in terms of tasks and responsibilities</p> <p>GC 13. Awareness of equal opportunities and gender issues.</p> <p>GC 14. The ability to exercise their rights and responsibilities as a member of society, to realize the values of civil (free democratic) society and the need for its sustainable development, the rule of law, human and civil rights and freedoms in Ukraine.</p> <p>GC 15. Ability to preserve and multiply moral, cultural, scientific values and achievements of society based on understanding the history and patterns of development of the subject area, its place in the general system of knowledge about nature and society and in the development of society, techniques and technologies. active recreation and leading a healthy lifestyle.</p>
<p>Professional PC1. Ability to collect medical information about the patient and analyze clinical data.</p> <p>PC2. Ability to determine the required list of laboratory and instrumental studies and evaluate their results</p>

PC3. Ability to establish a preliminary and clinical diagnosis of the disease

PC4. Ability to determine the required mode of work and rest in the treatment and prevention of diseases

PC5. Ability to determine the nature of nutrition during the treatment and prophylaxis of diseases

PC6. Ability to determine the principles and nature of treatment and prophylaxis of diseases

PC7. Ability to diagnose emergencies

PC8. Ability to determine tactics and provide emergency medical care

PC10. Ability to perform medical manipulations

PC11. Ability to solve medical problems in new or unfamiliar environments in the presence of incomplete or limited information, taking into account aspects of social and ethical responsibility

PC13. Ability to carry out sanitary and hygienic and preventive measures.

PC15. Ability to conduct medical and social examination and examination of working capacity.

PC16. Ability to maintain medical documentation, including electronic forms.

PC17. The ability to assess the impact of the environment, socio-economic and biological determinants on the state of health of an individual, family, population.

PC18. The ability to analyze the activity of a doctor, unit, health care institution, ensure the quality of medical care for children, adolescents and adults and increase the efficiency of the use of medical resources.

PC19. The ability to organize and integrate the provision of medical assistance to the population and the marketing of medical services.

PC20. Ability to conduct epidemiological and medical-statistical research on the health of children and adults; processing of social, economic and medical information.

PC21. It is clear and unambiguous to convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists, in particular to people who are studying.

PC23. Ability to develop and implement scientific and applied projects in the field of health care.

PC24. Adherence to ethical principles when working with patients and laboratory animals.

PC25. Adherence to professional and academic integrity, to be responsible for the reliability of the obtained scientific results

2. Program learning outcomes (PLR):

PLR 1. Have thorough knowledge of the structure of professional activity. To be able to carry out professional activities that require updating and integration of knowledge. To be responsible for professional development, the ability for further professional training with a high level of autonomy

PLR 2. Understanding and knowledge of basic and clinical biomedical sciences at a level sufficient for solving professional tasks in the field of health care.

PLR 3. Specialized conceptual knowledge that includes scientific achievements in the field of health care and is the basis for conducting research, critical understanding of problems in the field of medicine and related interdisciplinary problems

PLR 4. To isolate and identify the leading clinical symptoms and syndromes according to standard methods, using the previous data of the patient's history, the data of the patient's examination, knowledge about the person, his organs and systems, to establish a preliminary clinical diagnosis of the disease.

PLR 5. Collect complaints, history of life and diseases, evaluate psychomotor and physical development of the patient, state of organs and systems of the body, based on the results of laboratory and instrumental studies, evaluate information regarding the diagnosis, taking into account the age of the patient.

PLR 6. To establish the final clinical diagnosis by making a reasoned decision and analyzing the received subjective and objective data of clinical, additional examination, differential diagnosis, observing the relevant ethical and legal norms, under the supervision of the managing physician in the conditions of the health care institution.

PLR 7. Assign and analyze additional (mandatory and optional) examination methods (laboratory,

functional and/or instrumental) of patients with diseases of organs and body systems for differential diagnosis of diseases.

PLR 8. Determine the main clinical syndrome or what causes the severity of the victim/victim's condition (according to list 3) by making a reasoned decision and assessing the person's condition under any circumstances (in the conditions of a health care institution, outside its borders) including . in conditions of emergency and hostilities, in field conditions, in conditions of lack of information and limited time.

PLR 9. Determine the nature and principles of treatment (conservative, operative) of patients with diseases (according to list 2), taking into account the age of the patient, in the conditions of a health care institution, outside its borders and at the stages of medical evacuation, including in field conditions, on the basis of a preliminary clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes, in case of the need to expand the standard scheme, be able to substantiate personalized recommendations under the supervision of a doctor

PRN 10. Determine the necessary mode of work, rest and nutrition on the basis of the final clinical diagnosis, observing the relevant ethical and legal norms, by making a reasoned decision according to existing algorithms and standard schemes.

PLR 14. Determine tactics and provide emergency medical care in emergency situations in limited time in accordance with existing clinical protocols and standards of treatment.

PLR 16. Form rational medical routes for patients; organize interaction with colleagues in their own and other institutions, organizations and institutions; to apply tools for the promotion of medical services in the market, based on the analysis of the needs of the population, in the conditions of the functioning of the health care institution, its division, in a competitive environment.

PLR 17. Perform medical manipulations in the conditions of a medical institution, at home or at work based on a previous clinical diagnosis and/or indicators of the patient's condition by making a reasoned decision, observing the relevant ethical and legal norms.

PLR 18. To determine the state of functioning and limitations of a person's life activity and the duration of incapacity for work with the preparation of relevant documents, in the conditions of a health care institution, based on data on the disease and its course, peculiarities of a person's professional activity, etc. Maintain medical documentation regarding the patient and the contingent of the population on the basis of regulatory documents.

PLR 19. To plan and implement a system of anti-epidemic and preventive measures regarding the occurrence and spread of diseases among the population.

PLR 21. Search for the necessary information in the professional literature and databases of other sources, analyze, evaluate and apply this information.

PLR 22. Apply modern digital technologies, specialized software, statistical methods of data analysis to solve complex healthcare problems.

PLR 23. Assess the impact of the environment on the state of human health to assess the state of morbidity of the population

PLR 24. To organize the necessary level of individual safety (own and the persons they care about) in case of typical dangerous situations in the individual field of activity.

PLR 25. It is clear and unambiguous to convey one's own knowledge, conclusions and arguments on health care problems and related issues to specialists and non-specialists.

PLR 26. Manage work processes in the field of health care, which are complex, unpredictable and require new strategic approaches, organize work and professional development of personnel taking into account the acquired skills of effective teamwork, leadership positions, adequate quality, accessibility and fairness, ensuring provision of integrated medical care.

PLR 27. Communicate freely in the state language and in English, both orally and in writing to discuss professional activities, research and projects.

PLR 28. Make effective decisions on health care issues, assess the necessary resources, take into account social, economic and ethical consequences.

According to the requirements of the educational and professional program, students must **know:**

- 1) definition of nosologies in pediatric surgery;
- 2) etiology, pathogenesis of emergence and development of surgical pathology;

- 3) clinical manifestations (according to list 1 and 2) of surgical diseases;
- 4) possible complications with surgical pathology in children;
- 5) methods and standard schemes of survey, physical examination of children of different ages;
- 6) stages and methods of examination of a child with surgical pathology;
- 7) methodology for conducting laboratory and instrumental research (according to list 4);
- 8) possible changes in laboratory and instrumental examination methods observed in surgical diseases;
- 9) emergency situations in the children's surgery clinic and stages of providing emergency medical care to a child with surgical pathology (according to list 3 and 5);
- 10) algorithms for performing medical manipulations (according to list 5);
- 11) basic principles of conservative and surgical treatment in pediatric surgery;
- 12) regulatory documents for maintaining medical records of a patient with surgical pathology.

Be able to:

- 1) determine causal factors, mechanisms of pathophysiological changes in children's surgical pathology, stages of development, clinical manifestations;
- 2) conduct a physical examination of children with surgical pathology;
- 3) establish a preliminary and clinical diagnosis;
- 4) prescribe laboratory and instrumental research methods to confirm the diagnosis;
- 5) interpret the results of objective examination, laboratory and instrumental studies;
- 6) carry out differential diagnosis;
- 7) predict the occurrence of possible complications;
- 8) determine the tactics of managing a child with surgical pathology and providing emergency medical care;
- 9) choose treatment tactics (conservative, surgical) in children's surgery;
- 10) perform medical manipulations;
- 11) provide emergency medical care;
- 12) keep medical documentation;
- 13) act socially responsibly and consciously;
- 14) act on the basis of ethical considerations (motives).

3. THE STRUCTURE OF THE EDUCATIONAL DISCIPLINE

Discipline	Number of credits, hours, including			Student's out of class work	Year of study (semester)	Type of control
	Total Credits/hours ECTS	Auditory				
		Lectures (hours)	Practical classes (hours)			
Pediatric Surgery	1 credit / 30 hours	-	15	15	6 course (11-12 semester)	Calculation

4. TOPICS AND CONTENTS OF THE COURSE

Thematic plan of practical classes

№	Topic name	Hours
1.	Malformations of the respiratory system <ul style="list-style-type: none"> ➤ Organic, compression and functional airway stenoses ➤ Vascular rings and loops ➤ Agenesis, aplasia, pulmonary hypoplasia ➤ Congenital lung cysts ➤ Congenital emphysema ➤ Pulmonary sequestration ➤ Diaphragmatic hernias Atresia of the esophagus 	5
2.	Defects in the development of the digestive tube <ul style="list-style-type: none"> ➤ Pylorostenosis ➤ Duodenal intestinal obstruction ➤ Anomalies of intestinal rotation and fixation ➤ Atresia and stenosis of the small and large intestine ➤ Hirschsprung's disease ➤ Anorectal malformations Defects in the development of the anteriorabdominal wall, liver and biliary tract. <ul style="list-style-type: none"> ➤ Omphalocele, gastroschisis ➤ Umbilical and inguinal hernia ➤ Biliary atresia Liver and bile duct cysts 	5
3	Defects in the development of the musculoskeletal system. <ul style="list-style-type: none"> ➤ Congenital hip dislocation ➤ Congenital muscular torticollis ➤ Congenital limb pathologies ➤ Congenital spinal deformities ➤ Congenital malformations of the hand and foot: syndactyly, polydactyly, ectrodactyly Credit class	5
Total		15

Thematic plan of out of class work

№	Topic name	Hours
1.	Malformations of the liver and biliary tract. Biliary atresia. Etiology, pathophysiology. Clinical manifestations, possibilities of early diagnosis. Principles of operative treatment. Portoenterostomy (Kasai operation) and liver transplantation. Postoperative management of patients. Possibilities of improving the results of treatment of biliary atresia. Liver and choledochal cysts. Classification. Etiology, pathophysiology. Diagnostics. Surgical treatment. Complications, prognosis.	4
2.	Defects in the development of the genitourinary system. Anomalies of the position and development of the kidneys. Megaureter, hydronephrosis. Violation of the patency of the ureteric segment. Bladder-ureteral reflux. Cryptorchidism, testicular ectopy. Hypospadias; epispadias Varicocele. Bladder exstrophy.	4
3.	Congenital and acquired spinal deformities in children. Juvenile kyphosis. Congenital scoliosis. Idiopathic scoliosis. Scheuerman-Mau disease. Calve's disease.	4
4.	Congenital malformations of the chest in children. Funnel-shaped deformation of the chest. Keel-shaped deformation. Clinical manifestations, principles of treatment. Poland syndrome. Curarino-Silverman syndrome. Congenital splitting of the sternum. Isolated	3

deformations of ribs.	
Total	15

Types of educational activities of students according to the curriculum are: practical classes, independent work of students (IWS), in the organization of which teachers' consultations play a significant role. Thematic plans of practical classes, IWS, ensure the implementation in the educational process of all topics that are part of the content modules.

Practical classes include:

- curation of patients;
- research of patients with surgical pathology;
- study of the functional state of vital organs and systems of patients;
- practical use of surgical methods of diagnosis and treatment;
- solving clinical situational problems and tests;
- mastering the elements of medical equipment on patients, dummies;
- mastering the skills of operative techniques during operative interventions and work in the dressing room

5. TEACHING METHODS

Types of educational activities of graduate students according to the curriculum are:

- a) practical classes,
- b) independent work of students (IWS).
- c) case history

Practical classes include:

- 1) conducting an objective examination of a healthy child by students;
- 2) examination of children with surgical pathology;
- 3) detection of symptoms and syndromes observed in surgical diseases;
- 4) preliminary and clinical diagnosis;
- 5) differential diagnosis of various surgical diseases that cause emergencies in pediatric patients;
- 6) providing pre-hospital care to children with surgical pathology;
- 7) solving situational clinical problems, problems according to the test tasks.

6. TYPES OF CONTROL (CURRENT AND І ПІДСУМКОВИЙ)

Current control is carried out during practical classes and aims to verify the assimilation of students' learning material. Forms of current control are:

- a) test tasks with the choice of one correct answer, with the definition of the correct sequence of actions, with the definition of conformity, with the definition of a certain area in the photo or diagram ("recognition");
- b) solving typical situational problems;
- c) control of practical skills.

Comprehensive assessment of educational activity is carried out by issuing a traditional assessment, which is converted into points, respectively, in each of the classes, the student receives in the practical class: a grade of "5" - if he correctly completed at least 90% of the educational tasks; grade "4" - if he correctly completed at least 80% of educational tasks; grade "3" - if he correctly completed at least 60% of educational tasks; grade "2" - if he correctly completed less than 60% of educational tasks. At the final stage of the lesson, the teacher displays the total number of points and a traditional grade in the performance journal.

The student's independent work is evaluated in practical classes and is a component of the student's final grade.

Final control

The general evaluation system is carried out after the completion of the study of the discipline in the form of a credit.

Rating scales traditional 4-point scale, multi-point (200-point) scale, ECTS rating scale

Assessment is a form of final control of the student's assimilation of theoretical and practical material from the academic discipline. Final control is conducted in written form, using the Misa learning platform, according to the schedule. Lasts 2 academic hours.

The maximum number of points that a student can score for the current educational activity for admission to credit is 200 points.

The minimum number of points that a student must score for the current educational activity in order to be admitted to the credit is 120 points.

The calculation of the number of points is based on the grades obtained by the student on a 4-point (national) scale during the study of the discipline, by calculating the arithmetic mean (CA), rounded to two decimal places. The resulting value is converted into points on a multi-point scale as follows:

$$x = \frac{CA \times 120}{5}$$

For convenience, the table of recalculation on a 200-point scale is given:

Recalculation of the average score for current activity in multi-point scale

for scale for discipline

4 Score scale	200 Score scale	4 Score scale	200 Score scale	4 Score scale	200 Score scale	4 Score scale	200 Score scale	4 Score scale	200 Score scale
5	200	4,6	184	4,17	167	3,77	151	3,35	134
4,97	199	4,57	183	4,14	166	3,74	150	3,32	133
4,95	198	4,52	182	4,12	165	3,72	149	3,3	132
4,92	197	4,5	180	4,09	164	3,7	148	3,27	131
4,9	196	4,47	179	4,07	163	3,67	147	3,25	130
4,87	195	4,45	178	4,04	162	3,65	146	3,22	129
4,85	194	4,42	177	4,02	161	3,62	145	3,2	128
4,82	193	4,4	176	3,99	160	3,57	143	3,17	127
7,8	192	4,37	175	3,97	159	3,55	142	3,15	126
4,77	191	4,35	174	3,94	158	3,52	141	3,12	125
4,75	190	4,32	173	3,92	157	3,5	140	3,1	124
4,72	189	4,3	172	3,89	156	3,47	139	3,07	123
4,7	188	4,27	171	3,87	155	3,45	138	3,02	121
4,67	187	4,24	170	3,84	154	3,42	137	3	120
4,65	186	4,22	169	3,82	153	3,4	136	Less than 3	Not enough
4,62	185	4,19	168	3,79	152	3,37	135		

Discipline scores for students who have successfully completed the program are converted into a traditional 4-point scale according to the absolute criteria, which are given in the table below:

Discipline scores	Score on a 4-point scale
From 170 to 200 points	5
From 140 to 169 points	4
From 139 to 120 points	3

The objectivity of the assessment of students learning activities is checked by statistical methods (correlation coefficient between ECTS assessment and assesment on a national scale).

7. METHODOLOGICAL SUPPORT

Methodical support of practical classes:

1. Methodical development of practical classes for teachers.
2. Methodical instructions for practical classes for students.
3. Variants of test tasks to check the initial level of knowledge on each topic.
4. Variants of situational tasks to check the mastery of topics.
5. Variants of tasks (theoretical and practical) for final control.
6. Instructions for working with phantoms and dummies to practice practical skills.
7. Video materials, results of laboratory and instrumental methods of examination in various surgical pathologies in children.

7. LIST OF CONTROL QUESTIONS

1. Etiopathogenesis of congenital malformations. The concept of normal and anomaly.
2. Classification of congenital malformations of the respiratory system.
3. Clinical symptoms and syndromes in congenital malformations of the respiratory tract and lungs.
4. Methods of diagnosis of congenital malformations of the respiratory system. Modern radiation and endoscopic technologies.
5. Congenital stenosis of the trachea (full rings). Options, clinic, diagnosis, principles of treatment.
6. Compression stenosis of the trachea. Anatomical variants of the vascular ring.
7. Complete vascular ring: double aortic arch and right aortic arch. Clinic, diagnosis, principles of treatment.
8. Incomplete vascular ring: aberrant right subclavian artery, anomalies of the brachiocephalic trunk. Clinic, diagnosis, principles of treatment.
9. Pulmonary artery loop. Options, clinic, diagnosis, principles of treatment.
10. Compression stenosis of the trachea in tumors and cysts of the mediastinum. Variants of nosologies, clinical manifestations, diagnostic methods, principles of treatment.
11. Congenital isolated tracheoesophageal fistula. Clinic, diagnosis, principles of treatment.
12. Congenital emphysema of the lungs. Pathogenesis, clinic, diagnosis, principles of treatment.
13. Aplasia of the lung. Pathogenesis, clinic, diagnosis, differential diagnosis, possibilities of surgical treatment.
14. Congenital lung cysts. Classification, diagnosis, complications, surgical treatment.
15. Pulmonary sequestration. Options, features of pathogenesis, clinic, diagnosis, treatment.
16. Bronchiectasis. Clinic, diagnosis, treatment.
17. Tracheostomy. Indications and contraindications. Execution technique. Бронхоэктази.
18. Classification of esophageal atresia. Possibilities of prenatal diagnosis of esophageal atresia.

19. Clinical picture and diagnosis of neonatal esophageal atresia. The reasons for the development of aspiration pneumonia in various forms of esophageal atresia.
20. VACTERL association in esophageal atresia. Clinical manifestations, principles of diagnosis and treatment.
21. Preoperative preparation and choice of surgical tactics depending on the form of esophageal atresia.
22. Possible postoperative complications of esophageal atresia. Clinical manifestations, principles of diagnosis and treatment.
23. Tracheomalacia associated with esophageal atresia. Causes, clinical manifestations, methods of diagnosis, methods of treatment.
24. Definition of the term "congenital diaphragmatic hernia". Classification. Mechanism of defect formation.
25. Pulmonary hypoplasia and pulmonary hypertension in congenital diaphragmatic hernia. Causes of formation, morphological characteristics.
26. What are the clinical manifestations of congenital diaphragmatic hernia in a newborn? What diagnostic methods are used to confirm the diagnosis?
27. Assistance to a newborn with congenital diaphragmatic hernia in the delivery room. Principles of preoperative stabilization.
28. Principles of surgical treatment of DH. Operational accesses. Ways to close the diaphragm defect.
29. Postoperative management of newborns with DH. What surgical and non-surgical complications occur after correction of congenital diaphragmatic hernia? Possibilities of their prevention.
30. Features of the clinical course and modern methods of diagnosis of congenital hypertrophic pylorostenosis.
31. Preoperative preparation, surgical treatment of congenital hypertrophic pylorostenosis. Possibilities of laparoscopy.
32. Duodenal intestinal obstruction: causes, prenatal diagnosis, diagnostic algorithm in the newborn.
33. Classification of disorders of rotation and fixation of the intestine.
34. Clinical manifestations, diagnosis and treatment of intestinal rotation disorder, I period.
35. Classification of atresia of the small intestine. Pre- and postnatal diagnostics. Principles of treatment.
36. Hirschsprung's disease. Definition, anatomical forms.
37. Clinical manifestations of Hirschsprung's disease depending on the form of the course.
38. Modern principles of diagnosis of Hirschsprung's disease.
39. Principles of surgical treatment of Hirschsprung's disease depending on the anatomical form, clinical course and age of the child.
40. Intestinal dysgangliosis, hypogangliosis and other disorders of intestinal motility. Clinical manifestations, possibilities of diagnosis and differential diagnosis with Hirschsprung's disease.
41. Meconial intestinal obstruction. Etiology, pathogenesis, clinical manifestations.
42. Conservative and operative treatment of meconium intestinal obstruction.
43. Anorectal malformations in boys. Types, clinical manifestations.
44. Anorectal malformations in girls. Types, clinical manifestations.
45. Cloacal form of anorectal atresia. Classification, accompanying defects, clinical manifestations, complications.
46. Modern principles of treatment of anorectal malformations.
47. Complications after surgical correction of anorectal malformations, their prevention. Social and medical rehabilitation.

48. Prenatal diagnosis of malformations of the anterior abdominal wall: timing of diagnosis, methods of diagnosis, biochemical markers.
49. Clinical manifestations and treatment of gastroschisis.
50. Definition, classification, clinical manifestations of omphalocele. Methods of treatment of omphalocele.
51. Differential diagnosis of gastroschisis and omphalocele.
52. Causes, peculiarities of the anatomical structure of inguinal hernias in children. Principles of surgical treatment.
53. Umbilical hernia in children. Clinical manifestations, possible complications, principles of treatment, terms of surgical intervention.
54. Rare forms of malformations of the anterior abdominal wall. Muscle aplasia ("plum belly syndrome") - clinical manifestations, accompanying defects, complications.
55. Definition, classification of choledochal cysts.
56. Principles of surgical treatment of choledochal cysts. Prevention of ascending cholangitis.
57. Biliary atresia: definition of the defect, possible causes, classification.
58. Clinical manifestations and methods of diagnosis and treatment of biliary atresia.
59. Liver cysts: types, clinical manifestations, methods of diagnosis, indications for active surgical tactics.
60. Juvenile kyphosis: definition, classification, clinical manifestations, treatment principles, effectiveness criteria.
61. Congenital scoliosis: definition, clinical manifestations, principles of treatment.
62. Idiopathic scoliosis: definition, principles of classification, treatment depending on the degree of deformity.
63. Calve's disease: definition, principles of treatment.
64. Instrumental methods of research of patients with scoliosis.
65. Principles of surgical treatment of scoliosis in children.
66. Differential diagnosis of scoliotic posture and scoliosis.
67. What is a muscular crooked neck?
68. What is congenital clubfoot?
69. What are the early and late symptoms of congenital hip dislocation?
70. At what time after the birth of a child can be diagnosed with congenital clubfoot?
71. When to start conservative treatment of congenital clubfoot?
72. What is the normal acetabular angle in newborns?
73. Modern treatment of clubfoot.
74. What operation is used in the treatment of muscular torticollis?
75. What type of operations for the treatment of funnel-shaped deformation of the chest is used most often at the modern stage?
76. What characteristic symptom of funnel-shaped chest deformation in children do you know?
77. State the symptoms characteristic of Marfan syndrome?
78. The optimal age for surgical treatment of FSDC?
79. What is the normal excursion of the chest?
80. Name the complication of surgical treatment of chest deformities?

8.RECOMMENDED LITERATURE:

Bases literature

1. Ashcraft's pediatric surgery. Sixth edition / G.W. Holcomb, J. P. Merphy, D. J. Ostlie (Eds.) – Elsevier, 2014. – 1165 p.
2. Ashcraft's Pediatric Surgery / edited by G. W. Holcomb III, J. P. Murphy, associate editor

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Information resources

When studying the discipline, through the use of local and global computer networks, students use the following information resources and knowledge bases:

Ministry of Health - <http://www.moz.gov.ua/ua/portal/>

1. Вікіпедія - <http://uk.wikipedia.org>
2. UpToDate – <http://www.uptodate.com/home>
3. Access Medicine - <http://accessmedicine.mhmedical.com>
4. PubMed - <https://www.ncbi.nlm.nih.gov/pmc/>
5. Medscape eMedicine - https://emedicine.medscape.com/pediatrics_surgery
6. American Pediatric Surgical Association - <https://eapsa.org/>
7. European paediatric surgeon association - <http://www.eupsa.info/>

8. European Society of Paediatric Endoscopic Surgeons - <https://www.espes.eu/>