

**SUBSTANTIATION OF DIAGNOSTIC METHODS AND SURGICAL  
TREATMENT OF LOW FORMS OF ANORECTAL  
MALFORMATIONS IN CHILDREN**

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**Abstract:** *diagnosis and treatment of children with anorectal developmental abnormalities to date remain the most urgent and still unresolved problem of pediatric surgery. The duration of her study is correlated with the entire history of the development of surgical correction of congenital malformations. However, the issues of timely diagnosis and the choice of the optimal method of treatment, depending on the anatomical shape, are again and again the subject of study and discussion and still remain in the focus of attention of researchers and practitioners.*

*Analysis of statistical data indicates a high incidence of these malformations, which reaches*

*- 1:5000 newborns and has no tendency to decrease.*

*Mortality in these developmental anomalies reaches - 17%-18% and is due to either concomitant malformations or postoperative purulent-septic complications, the frequency of which reaches - 57-68% of cases.*

*In this article, when organizing rehabilitation care for children after diagnosis of congenital defects of the lower anorectal region and surgical treatment of congenital defects of the lower anorectal region, a model has been developed for realizing the possibilities of achieving a good functional result in this category of patients.*

**Keywords:** *anorectal defect, child's age, diagnosis, surgical treatment.*

**ОБОСНОВАНИЕ МЕТОДОВ ДИАГНОСТИКИ И  
ХИРУРГИЧЕСКОГО ЛЕЧЕНИЯ НИЗКИХ ФОРМ  
АНОРЕКТАЛЬНЫХ ПОРОКОВ РАЗВИТИЯ У ДЕТЕЙ  
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**Аннотация:** *диагностика и лечение детей с аноректальными аномалиями развития до настоящего времени остаются актуальнейшей и до конца нерешённой проблемой детской хирургии.*

*Длительность её изучения соотносима со всей историей развития хирургической коррекции врождённых пороков развития. Однако, вопросы своевременной диагностики и выбора оптимального метода лечения, в зависимости от анатомической формы, вновь и вновь являются предметом изучения и дискуссий и до сих пор остаются в центре внимания исследователей и практикующих врачей.*

*Анализ статистических данных свидетельствует о высокой частоте встречаемости данных пороков развития, которая достигает – 1:5000 новорожденных и не имеет тенденции к снижению.*

*Летальность при этих аномалиях развития достигает – 17%-18% и обусловлена либо сопутствующими пороками развития, либо послеоперационными гнойно-септическими осложнениями, частота которых достигает - 57-68% случаев.*

*В данной статье при организации реабилитационной помощи детям после диагностики врожденных дефектов нижней аноректальной области и хирургического лечения врожденных дефектов нижней аноректальной области разработана модель реализации возможностей достижения хорошего функционального результата у данной категории пациентов.*

**Ключевые слова:** аноректальный дефект, детский возраст, диагностика, хирургическая лечения.

**Relevance.** One of the most common congenital anomalies in pediatric coloproctology is atresia of the anus and rectum (more than 85% of all anorectal defects). The incidence of this malformation in the general population is quite high, and ranges from 1: 500 -1: 5000 newborns and, at present, does not tend to decrease [2, 5].

Atresia of the anus and rectum is a variety of malformations characterized by a congenital absence of the lumen of the digestive tract at the level of the terminal sections of the rectum, as well as a more or less pronounced hypoplasia of the neuromuscular elements of the urogenital diaphragm and sacrum and, as a rule, accompanied by symptoms of low intestinal obstruction.

In most cases, the clinical diagnosis of this pathology does not constitute difficulties and the need for special research methods to make a diagnosis, while the choice of surgical tactics and specific methods of surgical correction since the first radical operations in the middle of the 19th century [4] and up to the present time causes a lively discussion of pediatric surgeons, both domestic and foreign.

Of course, primary surgery is not the only and radical way to correct this pathology and does not lead to a one-stage cure for the patient. But, despite the achievements of coloproctology, a large number of modifications of proctoplasty and modern possibilities of rehabilitation (physical, physiotherapeutic, medication, reflex effects and regime moments) the proportion of unsatisfactory results in various clinics and countries of the world remains quite high and ranges from 10 to 60% [6]. [1,7]. According to the generalized statistics, intestinal incontinence is

observed in 30-60% of patients with anorectal defects in the long-term follow-up (3 or more years after the main reconstructive plastic surgery) [3]. The involuntary discharge of feces through the anus leads to severe mental and physical suffering, excludes the child from the active social life of the team, puts him in difficult relationships with his family and others.

Although it has been proven that the combination of a wide range of all the methods available in the arsenal of practical healthcare can improve the long-term results of treatment, but until now, the treatment of children with this pathology is a difficult, staged process that includes not only surgical correction of the defect, but also a long subsequent social and medical rehabilitation, often continuing until the child is transferred to an adult network.

It is noted that patients with the same forms of anal atresia are a heterogeneous group in terms of the prognosis for full functional adaptation and social rehabilitation, despite the apparent commonality of the pathology. Children with the same initial structural abnormalities of the pelvic floor apparatus often have different functional outcomes in long-term follow-up.

It should be noted that unsatisfied results of treatment after operations arise due to various reasons. However, they are reduced to two groups: firstly, these are the anatomical features of the defect; secondly, postoperative complications due to technical errors, infection, etc. [5].

According to some data, only 9% of poor functional results of surgical intervention are a consequence of the characteristics of the defect, and in 91% it is due to unsatisfactory surgical treatment [4,6]. Even a radical operation on the rectum and pelvic floor muscles in some cases is the factor that leads to transient functional disorders of the obturator apparatus of the rectum (for example, with rectal atresia with preserved anal canal). This suggests that improving the quality of operations, delicate tissue handling, and protection of the muscle fibers of the anal sphincter during surgery will help to achieve more favorable results.

**Purpose of work.** Diagnosis and treatment of congenital defects of low forms of anorectal defects in children is based on tactics.

**Object and subject of research.** Study and evaluation of patients treated with congenital defects of the lower anorectal region in Andijan regional city and district hospitals for 2021-2023, with data on the history of the disease in the hospital.

**Results of the study:** A safe level of dissection (resection) of the sacrococcygeal segment when using the posterior perineal approach for radical correction of high forms of anorectal malformation should pass along the cranial edge of the V sacral vertebra.

Echographic examination of patients with anorectal malformation at the preoperative stage makes it possible to establish the exact number of coccygeal vertebrae, the location of the end of the spinal canal, which makes it possible to determine intraoperatively a safe individual level of dissection (resection) of the end section of the spinal column.

It is necessary to include an echographic examination of the perineum in the scheme of mandatory preoperative examination of patients with high forms of anorectal malformation before performing radical surgery.

Determination of a safe level of dissection (resection) of the sacrococcygeal segment eliminates the development of complications associated with opening the lumen of the spinal canal.

Dissection (resection) of the sacrococcygeal segment allows expanding the surgical access to the atresized segment of the rectum when using the posterior perineal access to correct this congenital anomaly, and the possibility of correcting most high forms of anorectal malformation from one posterior perineal access allows to reduce the trauma of the operation as a whole, due to refusal to use the abdominal stage of mobilization of the rectum to bring it down to the perineum.

Expansion of the possibilities of the posterior perineal access due to dissection (resection) of the sacrococcygeal segment makes it possible to correct high forms of anorectal defect when the dome of the atretic intestine is located above the conditional pubococcygeal line.

The formation of a transverse ostomy using the round ligament of the liver to create a spur is the optimal method of palliative intervention as the first stage in the correction of high forms of rectal atresia.

The development of "primary rectal ectasia" in anorectal malformations allows the use of flap plastics to form the anal canal.

**Output.** The scientific and practical significance of the work lies in the research carried out, which made it possible to carry out scientific substantiation, development and improvement of measures of medical and organizational assistance to newborns and infants with low forms of congenital malformations of the lower anorectal region.

Implementation of the developed model of organization of rehabilitation care for children after surgical treatment of congenital defects of the lower anorectal region allows achieving a good functional result in this category of patients.

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