



## ANALYSIS OF CHARACTERISTICS OF CONSTIPATION IN CHILDREN

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### ABSTRACT

This article discusses the clinical characteristics and causative factors of colostasis in children. Conducted analysis of anamnestic data 149 patients, studied the results of clinical and anamnestic data and a comprehensive clinical examination.

### KEYWORDS

Nutritional and emotional factors, constipation, colostasis, children.

### INTRODUCTION

Constipation is a disorder of intestinal function, expressed in a slowdown (compared to the individual physiological norm) of the age-related rhythm of defecation, its difficulty, systematically insufficient bowel movement and/or changes in the shape and character of stool [4,5,8,9]. When analyzing the literature data, there is quite a huge amount of material devoted to the problems of constipation in children, but there is no systematic, comprehensive review and analysis. Until today, there are no clear indications for surgical treatment of colostasis, no

timing, and the problem of determining clear indications and contraindications for surgery has not been solved.[3,8,9,17]. When performing interventions, surgeons are based on their own experience and knowledge gleaned from well-known literary sources[1,5,16,22]. That is why there are still a large number of intra- and postoperative complications; there are no standards for the supervision of patients before and after surgical procedures[2,10,12,19,21]. There are no diagnostic or clinical criteria for colostasis in the age aspect in

children, which determines the relevance of conducting in-depth experimental and clinical research in this direction[3,11,15,18].

Currently, thanks to technological progress, modern imaging methods provide a fairly high degree of diagnosis of congenital pathology of the gastrointestinal tract, both at the prenatal and neonatal stages of development, allowing early detection of defects that may require emergency and (or) planned correction[9,13,15,18]. Diagnosis of patients subject to colon resection is not difficult, but the management of such patients still remains controversial [5,14,20].

**Purpose of the study.** Study of some clinical features of colostasis in children.

**Materials and research methods.** This work is based on examination and treatment data of 149 sick children aged from 1 month to 14 years with colostasis. An analysis was carried out of patients who received treatment in the department of pediatric surgery of the Bukhara Regional Children's Multidisciplinary Medical Center, which is the clinical base of the Department of Pediatric Surgery of the Bukhara State Medical Institute for the period 2012 - 2022.

The main criterion for including patients in our study was the presence of colostasis, patients' complaints about the lack of independent stool. The work does

not include patients with the total form of Hirschsprung's disease.

All children underwent a comprehensive examination used in pediatric surgery, including clinical, laboratory, and X-ray examinations: detailed study and history taking, clinical objective examination, and, if necessary, rectal digital examination; general clinical tests - general analysis of blood, stool and urine; X-ray contrast study - irrigography of the colon with barium sulfate solution according to the method of A.I. Lenyushkina. Sphincteromanometry was performed to determine sphincter tone in some patients.

**Results and discussion.** All children underwent a comprehensive examination used in pediatric surgery, including clinical, laboratory, and X-ray examinations: detailed study and history taking, clinical objective examination, and, if necessary, rectal digital examination; general clinical tests - general analysis of blood, stool and urine; X-ray contrast study - irrigography of the colon with barium sulfate solution according to the method of A.I. Lenyushkina. Sphincteromanometry was performed to determine sphincter tone in some patients.

When analyzing data on the distribution of patients with colostasis depending on gender and age, boys predominated - 82 (55.0%), compared to girls - 67 (45.0%). When dividing patients by age categories, in the age group from 1 year to 4 years, making up 34

(22.8%) for boys and 31 (20.8%) for girls, in the age group from 5 years to 9 years, boys accounted for 20 (13.4%), girls of this age made up 12 (8.0%) of the examined patients were predominant sick male children (Table 1). In our opinion, functional

constipation affects the quality of life of patients starting from the age of one year and is a reason for hospitalization in a hospital to determine the etiology of constipation.

### Distribution of patients with colostasis depending on gender and age

Table 1

Floor	Age of patients(WHO classification 2021)					
	0-27 days	01 – 11 month	01-4 years	5–9 years	10-14 years	Total: n, %
boys	*	24 16.1%	34 22.8%	20 13.4%	4 2.7%	82 (55%)
girls	*	21 14.1%	31 20.8%	12 8.0%	3 2.1%	67 (45%)
Total:	-	45 30.2%	65 43.6%	32 21.4%	7 4.8%	149 (100%)

Note: \*- children of the early postnatal period of development are not included in our study.

The smallest number of patients was aged 10-14 years – 7 (4.8%), which is associated with low parents' seeking medical help and acquiring skills to control stool frequency, as well as relative adaptation to the pathological condition in children of high school age.

In almost all studies of children with constipation, there was a higher prevalence of boys with constipation compared to girls. This may not be the result of a true difference in frequency, but due to differences in seeking medical advice and treatment.

Analysis of the nature of constipation showed the predominance of patients with constipation of an organic nature. When distributed according to the

origin of constipation, functional constipation accounted for 22 (15%), and organic constipation accounted for 127 (85%), which is due to the fact that before hospitalization, patients undergo partial examination in an outpatient setting (Fig. 1).

To make a diagnosis, we adhered to the classification of A.I. Khavkin (2000), which identifies the following definition criteria: compensated - stool once every 2-3 days, usually independent, but with a feeling of incomplete emptying and flatulence - 52 (34.9%); subcompensated – stool once every 3-5 days while taking laxatives and a cleansing enema – 74 (49.7%); decompensated - there is no independent stool, its

delay can reach 10 or more days, accompanied by abdominal pain, intoxication, emptying is possible using siphon or hypertensive enemas - 23 (15.4%).

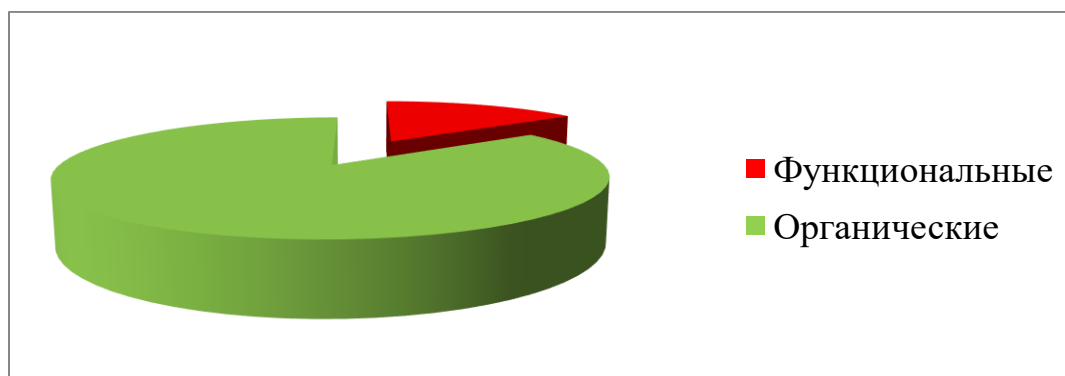


Fig.1. Distribution of patients depending on the origin of constipation

The predominance of the compensated and subcompensated stages of constipation in the examined sick children was established (Fig. 2).

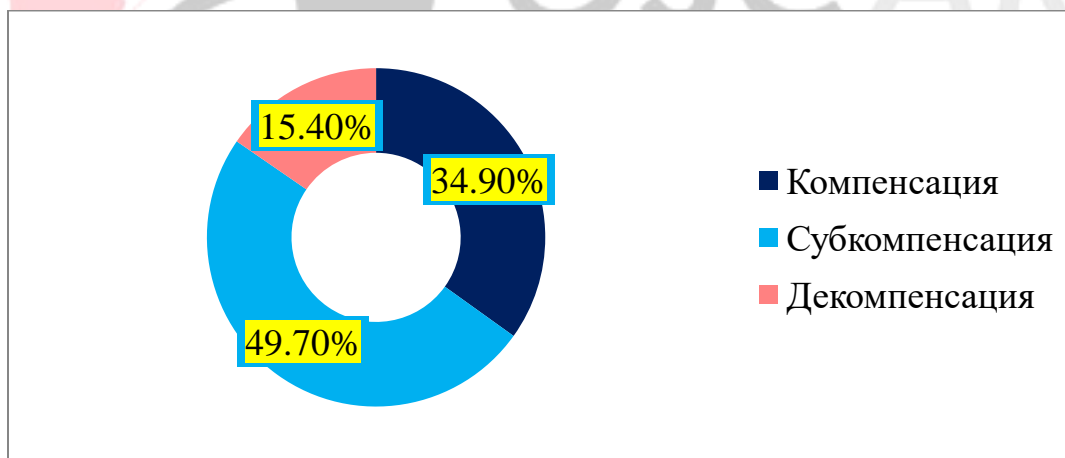


Fig.2. Distribution of patients depending on the stage of colostasis

In our studies, in 149 patients examined, the following comorbidity with constipation was revealed (Table 2), which influenced the course of the underlying disease. At the same time, the most common comorbid

background in children with colostases were children with dolichosigma, 56 (37.6%), anemia - which amounted to 40 (26.8%) of the examined patients, as

well as dolichocolon 28 (18.9%) and megacolon 28 (18.2%).

### Frequency of comorbidity in sick children with colostasis

Table 2.

Nosology	Number of patients	
	Abs	%
Anemia	40	26.8
Hirschsprung's disease	10	6.7
Dolichosigma	56	37.6
Dolichocolon	28	18.9
Megacolon	27	18.2
Payer's disease	7	4.7
Hilaiditi syndrome	3	2.0
Ectopia ani	2	1.3
Atresia ani et recti	1	0.7
Stenosis ani	3	2.0
SPO BPPR*	14	9.4
<b>Total</b>	<b>191</b>	

\* note: SPO BPPR - Condition after abdominal-perineal proctoplasty surgery for Hirschsprung's disease, anorectal malformation, etc.

### CONCLUSION

Thus, based on the results of the study and the study of regional characteristics of chronic constipation in the Bukhara region, it was established that when

distributed by gender and place of residence, boys aged from one year to 9 years of age are more likely to suffer.

Among the causative factors leading to constipation, the highest frequency is represented by pathologies of the sigmoid colon (dolichocolon, megacolon, dolichosigma) - 75.2% of cases.

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