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**OCCURRENCE OF FUNCTIONAL CONSTIPATION IN CHILDREN OF  
DIFFERENT AGE**

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**Abstract**

We examined 74 children of different ages who applied to the Samarkand Regional Children's Multidisciplinary Medical Center with constipation. Interviews were conducted with 74 children aged 1 month to 16 years and their parents, who were undergoing inpatient treatment at the gastroenterology department of VBKTTM. A high frequency of functional constipation was noted in children aged 2 to 11 years. Clinically, in children, difficulty in defecation, long stay in the toilet, abdominal pain, feeling of incomplete emptying of the intestine after defecation, pathological changes in stool were detected. A high frequency of constipation complications was found.

**Keywords:** children, functional constipation, act of defecation, spread.

**Relevance of the Topic**

Constipation in children is one of the most urgent problems in the field of gastroenterology. The incidence of constipation in children ranges from 1 to 12%, depending on age and observation group. Constipation is a general, extra-intestinal and symptom complex of local diseases.

Chronic constipation is characterized by persistent or intermittent bowel dysfunction lasting more than 6 months, less than 3 bowel movements per week, and forced straining.

The origin of constipation depends on several reasons, the main of which are: alimentary: - As a result of a lack of liquid, fiber or food in general; - lack of vegetables and fruits in the diet, excessive amount of animal protein; - transferring the child from natural feeding to mixed or artificial feeding, changing mixtures, etc.; "habitual" or psychogenic constipation; neurogenic - complications of organic damage to the central nervous system, reflex constipation; organic damage of the large intestine - dolichomegacolon, neurointestinal dysplasia of the large intestine, Peir's syndrome, cecum or sigmoid motility, hypogangliosis (Girschsprung's disease); mechanical bowel obstruction / faecal obstruction - adhesions, tumors, enlarged lymph nodes, worms, invasions; as a result of sending the child to kindergarten or school; post-infectious constipation, mainly after acute intestinal infections; hypodynamic intestinal dyskinesia

- hypodynamia, sedentary lifestyle; inflammatory bowel disease - Crohn's disease, nonspecific ulcerative colitis, chronic enteritis, colitis, etc.; endocrine - hypothyroidism, diabetes, hyperparathyroidism, pituitary diseases, pheochromocytoma, hypoestrogenemia; violation of water and electrolyte metabolism, cholestasis, lack of vitamins of group B and K; toxic (as a result of exposure to lead, mercury, thallium, nicotine, tea, cocoa), medicinal (opiates, muscle relaxants, ganglioblockers, barbiturates, anticonvulsants, antacids. as a result of sending the child to kindergarten or school; post-infectious constipation, mainly after acute intestinal infections; hypodynamic intestinal dyskinesia - hypodynamia, sedentary lifestyle; inflammatory bowel disease - Crohn's disease, nonspecific ulcerative colitis, chronic enteritis, colitis, etc.; endocrine - hypothyroidism, diabetes, hyperparathyroidism, pituitary diseases, pheochromocytoma, hypoestrogenemia; violation of water and electrolyte metabolism, cholestasis, lack of vitamins of group B and K; toxic (as a result of exposure to lead, mercury, thallium, nicotine, tea, cocoa), medicinal (opiates, muscle relaxants, ganglioblockers, barbiturates, anticonvulsants, antacids. as a result of sending the child to kindergarten or school; post-infectious constipation, mainly after acute intestinal infections; hypodynamic intestinal dyskinesia - hypodynamia, sedentary lifestyle; inflammatory bowel disease - Crohn's disease, nonspecific ulcerative colitis, chronic enteritis, colitis, etc.; endocrine - hypothyroidism, diabetes, hyperparathyroidism, pituitary diseases, pheochromocytoma, hypoestrogenemia; violation of water and electrolyte metabolism, cholestasis, lack of vitamins of group B and K; toxic (as a result of exposure to lead, mercury, thallium, nicotine, tea, cocoa), medicinal (opiates, muscle relaxants, ganglioblockers, barbiturates, anticonvulsants, antacids. after acute intestinal infections; hypodynamic intestinal dyskinesia - hypodynamia, sedentary lifestyle; inflammatory bowel disease - Crohn's disease, nonspecific ulcerative colitis, chronic enteritis, colitis, etc.; endocrine - hypothyroidism, diabetes, hyperparathyroidism, pituitary diseases, pheochromocytoma, hypoestrogenemia; violation of water and electrolyte metabolism, cholestasis, lack of vitamins of group B and K; toxic (as a result of exposure to lead, mercury, thallium, nicotine, tea, cocoa), medicinal (opiates, muscle relaxants, ganglioblockers, barbiturates, anticonvulsants, antacids. after acute intestinal infections; hypodynamic intestinal dyskinesia - hypodynamia, sedentary lifestyle; inflammatory bowel disease - Crohn's disease, nonspecific ulcerative colitis, chronic enteritis, colitis, etc.; endocrine - hypothyroidism, diabetes, hyperparathyroidism, pituitary diseases, pheochromocytoma, hypoestrogenemia; violation of water and electrolyte metabolism, cholestasis, lack of vitamins of group B and K; toxic (as a result of exposure to lead, mercury, thallium, nicotine, tea, cocoa), medicinal (opiates, muscle relaxants, ganglioblockers, barbiturates, anticonvulsants, antacids. endocrine - hypothyroidism, diabetes, hyperparathyroidism, pituitary diseases, pheochromocytoma, hypoestrogenemia; violation of water and electrolyte metabolism, cholestasis, lack of vitamins of group B and K; toxic (as a result of exposure to lead, mercury, thallium, nicotine, tea, cocoa), medicinal (opiates, muscle relaxants, ganglioblockers, barbiturates, anticonvulsants,

antacids. endocrine - hypothyroidism, diabetes, hyperparathyroidism, pituitary diseases, pheochromocytoma, hypoestrogenemia; violation of water and electrolyte metabolism, cholestasis, lack of vitamins of group B and K; toxic (as a result of exposure to lead, mercury, thallium, nicotine, tea, cocoa), medicinal (opiates, muscle relaxants, ganglioblockers, barbiturates, anticonvulsants, antacids).

Often, the appearance of constipation in childhood is associated with the beginning of going to kindergarten (school): most children are ashamed to ask to go to the toilet, to use the toilet in unfamiliar conditions or in the presence of other children and adults. As a result, the child deliberately delays the act of defecation. Also, it can develop in response to the reprimands of kindergarten nurses, not allowing them to use the toilet at the time of kindergarten. This is especially true for shy children. The delay in the act of defecation leads to the accumulation of a large amount of feces in the rectum, increases the dryness of the feces, which stretches its walls. As a result, the subsequent defecation is associated with the passage of compressed feces through the ampulla of the rectum. causes riq, which leads to excessive stretching of the anal opening and the formation of microtraumas. "Psychogenic constipation" develops as a result of the child deliberately delaying defecation to avoid pain, which in turn leads to the formation of an incorrect reflex. Over time, these behaviors become automatic responses. Absence of rectoanal reflex turns constipation from "psychogenic" to "habitual". When the rectal wall is stretched, it causes feces to rub in between, which causes shame and fear in the child. If adults do not understand what is going on in the child and punish the child, the situation will be even worse. In addition, the psychological etiology of constipation in early childhood is not teaching the child to defecate on time, forcing him to go to the potty, severely punishing him for not being able to hold the toilet causes stress in the child and deliberately suppresses the child's desire to go to the toilet. As a result of intestinal stagnation, the child's abdominal pressure increases, which leads to a decrease in appetite, often nausea and vomiting. The child cries, gets nervous, gets tired quickly, sleep is disturbed. Thus, chronic functional constipation in children attending preschool education (school) institutions is of social importance and requires mandatory correction. The purpose of this study was to study the characteristics and clinical characteristics of constipation in children, taking into account the diagnostic criteria of Rome Consensus III (2006).

### Research Method

We conducted our research among children from 1 month to 16 years who were treated with the diagnosis of constipation in the gastroenterology department of VBKTTM of Samarkand city. During the examination, a survey was conducted with the children or their parents, medical anamnesis and life anamnesis were collected. The questionnaire included 21 questions, including all the diagnostic criteria of the Rome Consensus III (2006), since 95% of children have functional constipation. These criteria are:

- defecation less than 3 times a week;
- Defecation with difficulty in more than 1/4 cases;

- in 1/4 of each act of defecation, a drop in the abdomen or hard stool;
- a feeling of incomplete emptying of the intestine in 1/4 of each act of defecation;
- feeling of anorectal obstruction/clogging in the intestine in 1/4 of each act of defecation;
- manual assistance in 1/4 of each act of defecation;
- absence of metabolic and endocrine diseases.

Constipation may include abdominal pain, forced but ineffective defecation, feeling of heaviness, flatulence, feeling of incomplete emptying after defecation. Constipation diagnostic criteria include a combination of two or more symptoms present for at least 2 weeks (in infants and preschool children) or 12 weeks in school children.

### Research results and Discussion

Of the 74 patients examined by us, 41 (55%) were boys and 33 (45%) were girls. 49 (66.2%) of the children treated in the hospital were children aged 2 to 11 years. In 2022-2023, among all examined children, 25 (34%) of early age (from 0 to 3 years old), 19 (25%) of preschool age (from 4 to 6 years old), junior school age (from 7 to 12 years old) - 26 people (35%), high school age (from 12 to 16 years old) - 5 people (6%). According to these criteria, chronic constipation was found in 10% of the surveyed children. A study of family history showed that more than a third of all examined children - 39 (52%) close relatives have patients with constipation. Among children suffering from constipation, defecation act up to 3 times per week was recorded in 53 (71%) children. It is worth noting that co-pathological manifestations are noted at a high frequency in children with constipation. Thus, 42 patient children (56.7%) had difficulty in defecation, strain. Another characteristic feature of children suffering from constipation is staying in the toilet for a long time, 51 children (69%) noted it after each defecation. Pathological appearance of feces in the form of "sheep" feces was recorded in 57 children (77%). 54 children (73 %) of the sick children - from time to time, were disturbed by the feeling of stomach rest and satiety. In 65 children patients (87.8%) the feeling of incomplete emptying of bowels was noted after each defecation. As a result of complications of constipation in 21 children (28.3%), the presence of traces of blood in each defecation movement was noted occasionally in 12 children (16.2%). Fear of defecation was observed in 32 (43.2%) children, rubbing of feces in 23 (31%), anal sphincter pain during defecation was observed in 21 (28%) children. It is worth noting that in total 17 children (23%) their parents sometimes helped them to empty their bowels. 12 children (16.2%) occasionally had traces of blood in each defecation. Fear of defecation was observed in 32 (43.2%) children, rubbing of feces in 23 (31%), anal sphincter pain during defecation was observed in 21 (28%) children. It is worth noting that in total 17 children (23%) their parents sometimes helped them to empty their bowels. 12 children (16.2%) occasionally had traces of blood in each defecation. Fear of defecation was observed in 32 (43.2%) children, rubbing of feces in 23 (31%), anal sphincter pain during defecation was observed in 21 (28%) children. It is worth noting

that in total 17 children (23%) their parents sometimes helped them to empty their bowels.

The questionnaire used in our study also includes questions about the impact of constipation on the child's health, daily activities, and studies, and these questions were taken to assess the impact on the child's health and life activities. At the same time, it turned out that every 4-5 children noted a significant impact of constipation on general health and daily activities. The obtained results once again confirm that in the diagnosis of constipation, it is important to consider not only the frequency of defecation, but also other manifestations of functional disorders.

### Summary

According to the results of a survey of 74 children aged 1 month to 16 years who were treated in the gastroenterology department of VKTBTM in 2020-2022, the incidence of chronic constipation among children was 60%. To determine the true frequency of constipation, the Rome consensus III diagnostic criteria (2006) were used. At the same time, in children with constipation, according to the Rome III criteria, other clinical manifestations of functional disorders were also noted at a high frequency. Difficulty in defecation, staying in the toilet for a long time, restlessness of the stomach, feeling of fullness, feeling of incomplete emptying of the intestine during defecation, pathological changes in stool (hard, "sheep") were observed. Children or their parents according to the results of the survey, it was found that there are often clinical manifestations associated with complications of constipation. Analysis of the quality of life of children suffering from constipation showed that this pathology affects the general condition of children, as well as their daily activities and studies. Timely examination of children makes it possible to identify patients with organic and inflammatory bowel diseases, and it is important to prescribe adequate therapy to prevent possible complications. Analysis of the quality of life of children suffering from constipation showed that this pathology affects the general condition of children, as well as their daily activities and studies. Timely examination of children makes it possible to identify patients with organic and inflammatory bowel diseases, and it is important to prescribe adequate therapy to prevent possible complications. Analysis of the quality of life of children suffering from constipation showed that this pathology affects the general condition of children, as well as their daily activities and studies. Timely examination of children makes it possible to identify patients with organic and inflammatory bowel diseases, and it is important to prescribe adequate therapy to prevent possible complications.

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