

**OPTIMIZATION OF TREATMENT METHODS FOR IRRITABLE BOWEL  
SYNDROME**

**Pulatova Nigina Yuldosh kizi**

1st year clinical resident at Department №1 of Pediatrics and Neonatology

**Ibragimova Marina Fedorovna**

PhD and/or associate professor of department №1 of Pediatrics and Neonatology

Samarkand State Medical University.

Samarkand, Uzbekistan

**Annotation:** The purpose of the study was to optimize treatment methods for children with irritable bowel syndrome. Material and research methods. We examined 50 children under 3 years of age with irritable bowel syndrome who were admitted to the gastroenterology department of the Regional Children's Multidisciplinary Medical Center. 25 children with irritable bowel syndrome received the prebiotic Duphalac in an age-appropriate dosage and fermented milk mixtures (Group I), and the remaining 25 patients (Group II) received traditional therapy.

**Key words:** Children, therapy, irritable bowel syndrome.

**Relevance.** One of the leading places in the structure of pathology of the digestive organs in children is occupied by functional disorders of the gastrointestinal tract, which are more common among young children. With functional disorders, motor function, digestion and absorption of nutrients, the composition of intestinal microflora and the activity of the immune system change [4,5,11]. According to the literature, the causes of functional disorders are varied and often lie outside the affected organ and are caused by a violation of the nervous and humoral regulation of the digestive tract [3,7,10,12]. All this contributes to the development of dyskinetic disorders and the emergence of functional disorders, the correction of which in children is important to this day [2,13] and remains a pressing problem for pediatricians.

Their pathogenesis involves: disorders of neuroendocrine regulation, toxic effects, insufficiency of local circulation and factors leading to dystrophic changes in the glandular apparatus and integumentary epithelium [1,12].

Irritable bowel syndrome is a functional disorder of the motor and secretory functions of the intestine, the main manifestations of which are disruption of the act of defecation, accompanied by pain in the absence of organic diseases, mainly of the colon without its structural changes. With this disease, pain and discomfort in the abdomen are associated with a change in the frequency and nature of stool and a decrease in pain and discomfort after defecation.

Functional disorders accompanied by cramping abdominal pain due to intense contractions of the intestinal wall, diarrhea or constipation occur in almost all children, starting from the first months of life, and a number of authors consider them physiological [6, 8, 9, 14, 15].

**The purpose of the study** was to optimize treatment methods for children with irritable bowel syndrome.

**Material and research methods.** We examined 50 children under 3 years of age with irritable bowel syndrome who were admitted to the gastroenterology department of the Regional Children's Multidisciplinary Medical Center. The clinical study was conducted according to a

questionnaire. The qualitative and quantitative composition of the intestinal microbiota of sick children was studied in a bacteriological laboratory using the generally accepted method of stool culture [1]. Isolation and identification of bifidobacteria was carried out according to generally accepted research methods, taking into account the degree of dilution of feces and the size of the inoculum dose. 25 children with irritable bowel syndrome received the prebiotic Duphalac in an age-appropriate dosage and fermented milk mixtures (Group I), and the remaining 25 patients (Group II) received traditional therapy.

**Research results.** Diagnostic criteria for the disease were: recurrent abdominal pain or discomfort associated with two or more of the following: improvement after defecation; pathological stool frequency (less than 3 times a week); pathological form of stool.

Additional symptoms were: straining during bowel movements; urgency or feeling of incomplete emptying, mucus, rumbling and bloating. In sick young children admitted to the hospital with irritable bowel syndrome, constipation of a nutritional nature was most often recorded. From the anamnesis it was revealed that among the examined 29 (58%) patients were mixed and 21 (42%) children were bottle-fed. The development of the disease was facilitated by: unfavorable obstetric history of the mother (14-28%), allergic reactions to food (4-8%), previous intestinal infections (12-24%), helminthiasis (35-70%), hypoxic-ischemic changes in the nervous system. systems (9-18%) transferred in utero. The anamnesis also revealed that 42-84% of children fell ill after a violation of the diet, abuse of carbohydrates, or lack of protein in food. In 15-30% of children, the cause of constipation was an unbalanced diet of the mother. The majority of patients had anemia in 41-82% of cases, rickets in 24-48% of patients, and every third child had signs of atopic dermatitis.

The mothers of patients complained upon admission to the hospital about periodic sudden anxiety and causeless crying of the child, which continued several times a day. Constipation was present in 33-66% of patients, regurgitation in 18-36% of cases, bloating in 29-58% of patients and anorexia in 8-16% of children. Frequency of bowel movements that occurs with the onset of an attack of pain was noted in 7-14% of cases, 1-2% of children had mucus discharge with feces.

Sick children received Duphalac as drug therapy aimed at eliminating symptoms of gastrointestinal dysfunction.

Nursing mothers whose children were mixed-fed underwent nutritional correction with the exclusion of foods that cause gas formation; it was recommended to raise the baby's head after feeding, avoid overfeeding the baby, and massage the abdomen clockwise before feeding. To normalize the activity of the gastrointestinal tract, eliminate constipation and intestinal imbalance, the prebiotic Duphalac and diet therapy with fermented milk mixtures were recommended as part of complex treatment for sick patients of group I.

The basis for their prescription was that they are absorbed faster, are easily digested, normalize intestinal motility, and promote the growth of bifidobacteria and lactobacilli. It is known that the restoration of intestinal microflora is carried out with the help of eubiotics.

The role of prebiotics - food ingredients that help selectively stimulate the growth and metabolic activity of bacteria living in the large intestine with high adsorption capacity, have a beneficial effect, improve the health of the macroorganism by selectively stimulating the growth or metabolic activity of one or more strains of bacteria living in the large intestine ( dietary fiber, Duphalac containing lactulose, etc.). Prebiotics are utilized by the microflora of the colon, which promotes the growth of bifidum and lactobacilli and changes in the pH of the environment in the

colon. As a result of the use of the prebiotic Duphalac and fermented milk mixtures in children of group I, as a result of treatment, flatulence disappeared on the next day, and by the end of the 2nd day, abdominal pain disappeared, the general condition improved in 49-81.7% of patients. By the end of 3 days, in group I patients, the stool returned to normal and became regular. In group II, bloating, constipation and bifid flora deficiency persisted 1.2 bed/days longer.

The effectiveness of Duphalac therapy in combination with fermented milk formulas was noted in the normalization of stool softness and improvement in the baby's condition within a short time.

Conclusions. Thus, complex treatment of children with irritable bowel syndrome, accompanied by intestinal dysbiosis and constipation, should begin with the use of the prebiotic Duphalac in combination with fermented milk mixtures, which help restore the intestinal microbiota and the functions of the gastrointestinal tract.

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