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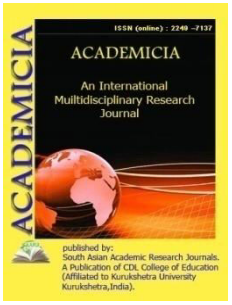

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A NEW APPROACH TO THE TREATMENT OF CHRONIC CONSTIPATION AND DIAGNOSED DYSBACTERIOSIS IN CHILDREN WITH DOLICHOSIGMA

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ABSTRACT

Symptoms of chronic constipation in children with dolichosigma are based on the results of studies conducted by some scientists in recent years (N.I. Lyonyushkin 1990, A.S.Sulaymonov 1993, Rivkin V.A 2012, G.N.Sheligin 2012) and cited data that these diseases are detected in 30-40% of children aged 2-11 years. In addition (Lesnyak S.V., Evtukhova L.N., Shimchuk L.F. 1998, Bondarenko V.M. 2003) in the study of the microflora of fecal analysis of children with dolichisigma they found a sharp decrease in the number of bifidobacteria and lactobacilli, pathogens; they have been shown to cause dysbacteriosis as a result of an increase in the number of microflora (Escherichia coli, Proteus, Streptococcus, Staphylococcus, and Bacteroids), as well as changes in clinophysiological conditions in some sick children.

KEYWORDS: *Escherichia Coli, Proteus, Streptococcus, Staphylococcus, Bacteroids, Colostasis, Morph Functional Changes, Constipation, Dysbacteriosis,*

INTRODUCTION

Y.N.Nishanov 1996, B.A.Shindaryov 1998, G.A.Onishchenko 2002 Dysbacteriosis was caused by changes in the number and quality of the microflora of the small intestine as a result of partial or complete removal of the colon. To overcome this dysbacteriosis, experimental animals were shown to be eliminated by injecting bifidobacteria and lactobacilli into the digestive system through a probe, and the gastrointestinal tract evacuator and absorption function was restored in 15–20 days.

Untimely evacuation of feces in the sigmoid part of the colon leads to its excessive hardening, expansion and elongation of this part, ie, the development of dolichosigma (E.G. Tsimbalova, A.S. Potapov 2002).

THE MAIN FINDINGS AND RESULTS

In recent years, various theoretical views on the origin and course of dolichosigma have been observed among scientists (Clayden Q., Keshigar 2003y, Sheligin Yu.N 2012). In addition to the data of the above scientists, some gastroenterologists link the symptoms of constipation in dolichosigma to the following factors:found that the lack of large gluten in the diet consumed causes hypodynamics, stressful situations and chronic colitis and dysbacteriosis in the colon (BiezinA.P. 1994, Dvoryakovsky S.Y. 2001).

According to some researchers, as a result of constipation (colostasis) among children and adolescents with long-term constipation, their physical development and anthropometric indicators are clearly lagging behind (Y.N. Nishanov, J.T. Mamasaidov, M.S. Isroilov 2019).

Thus, in recent years, studies of articles and monographs published by researchers have shown that constipation is caused by dolichosigma in children, and surgical and conservative methods are used to treat it.

However, due to differences of opinion among some scientists, morphofunctional changes in the sigmoid colon in children currently suffering from dolichosigma; as well as the timely detection of dysbacteriosis, as well as the delay in physical development due to this disease and a new approach to the treatment of the pathological process have become a pressing problem facing pediatric surgeons today.

PURPOSE

The use of new methods of conservative treatment of morphofunctional changes, constipation, dysbacteriosis and symptoms of physical retardation caused by dolichosigma.

METHODS OF STUDY

Anamnesis collection, irrigography, irrigoscopy, endoscopy, colonoscopy, histomorphological, bacteriological, anthropometric methods and clinical-biochemical examinations.

OBJECT OF RESEARCH AND RESULTS

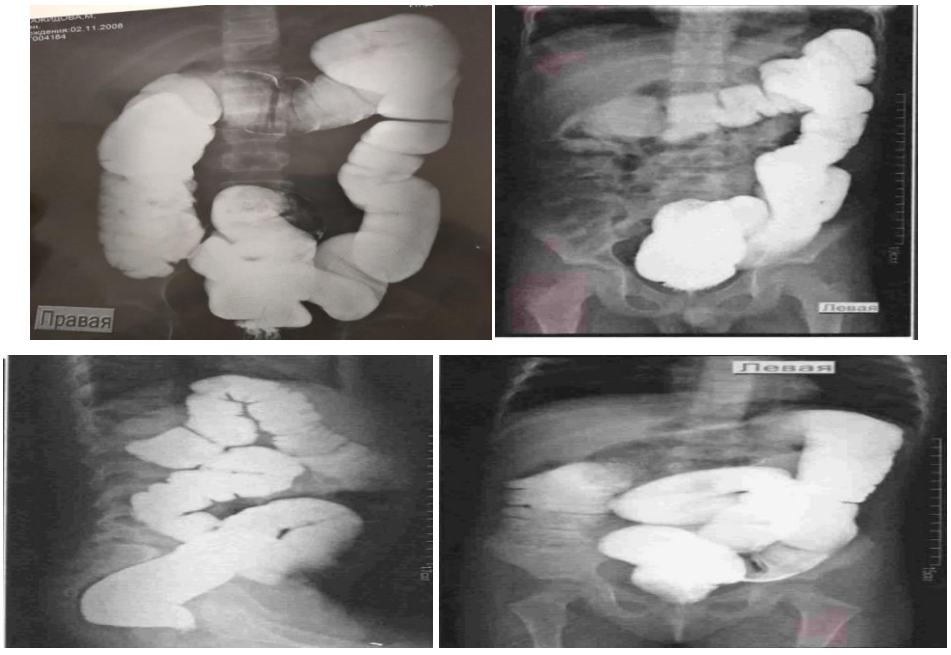
To identify and study dolichosigma in children, it was studied in 150 patients (92 boys, 58 girls) aged 0-18 years in the surgical department of the Children's Multidisciplinary Medical Center of Fergana region during 2018-2021.

Dolichosigma is the elongation and dilation of the sigmoid colon. The terms "dolichocoln" and "dolichosigma" are often used by clinicians and radiologists, but do not define the exact boundaries of the pathology. K.N.Bossovskiy 1989).

MS Hechinashvili (1957), who studied sigmoid bowel changes in infants, divided it into the following types: “S” simon (53%), single-loop (27.8%), double-loop (57%) and multi-loop (9.9%). If previously dolichosigma was considered a pathogenetic manifestation of chronic constipation, now the question is whether to consider it as a congenital defect of development. In recent years, 25% of more than 1,000 children with chronic constipation and recurrent abdominal

pain have been diagnosed with dolichosigma as a result of dynamic observations (A.V. Makarov, Z.A. Trafimova, and N.P. Kush 1982). Thus, on the one hand, sigmoid colon elongation is considered normal in healthy children; while on the other hand, dolichosigma is associated with recurrent abdominal pain and chronic constipation. At the clinic, parental complaints mainly consist of chronic constipation or recurrent abdominal pain in the child. Chronic constipation is caused by a disorder of sigmoid intestinal motility and occurs in most children after 60% of their lives have been switched to artificial feeding, and in 40% of cases it occurs between the ages of 3-6 years. Abdominal pain is caused by stagnation of intestinal mixtures, flatulence, as well as twisted and tangled loops of excess loops, and scarring of the uterus, which occurs at the age of 5-7 years. Sometimes the pain passes with vomiting. The disease is clinically distinguished in 3 stages: compensatory, sub-compensatory, and decompensated.

Based on the above data on dolichosigma and our study of sick children, our main plan was to eliminate the causes and consequences of this disease in all respects, namely, morphofunctional changes in the sigmoid colon, constipation and dysbacteriosis. For this purpose, 150 children (92 boys, 58 girls) with dolichosigma were thoroughly examined and treated in the Department of Pediatric Surgery of the Fergana Regional Multidisciplinary Medical Center for 2018-2021. Of these, 0-5 years - 55 (36.6%), 6-10 years - 58 (38.6%), 11-15 years - 27 (18%), 16-18 years - 10 (6, 6%) people. After the patient was admitted to the hospital, symptomatic signs (abdominal rest, abdominal pain, signs of constipation, weakness, loss of appetite, and anemia) were identified, depending on the age of the children and accumulated from them. X-ray examinations (irrigography and irrigoscopy) were performed in such sick children. X-ray images were taken in two views (anterior and lateral), after which the colon was cleared of contrast. Examination of radiographs showed an elongation and dilation of the S-shaped intestine, the appearance of additional loops (up to 2-3), no change in the shape and position of the abdomen, flattening of the colon gaustras, as well as single-loop - 34.6%, double-loop - 49.1 %, three-loop -13.4% and multi-loop -2.9% were found to have symptoms.



Clinical and biochemical analysis of blood showed the following cases: normochromanemia in 50.6% of patients, erythrocyte depletion in 39% of patients, leukopenia in 35% of patients, hypoproteinemia and dysprotenemia in 12% of patients. Toxic hepatitis was observed in 8 patients due to chronic stool retention in the colon.

Bacteriological laboratory examination of the stool of 32 (21.3%) of the studied patients revealed the presence of dysbacteriosis in 28 (87.5%). We can also consider this on the basis of the table (Table 1,2,3).

TABLE №1

№	Micro-organisms	Normal	In the patient
1.	Bifidobacteria	10^{10}	10^{2}
2.	Lactobacterin	10^{7}	10^{1}
3.	Enterococci	10^{5}	10^{8}
4.	Staphylococcus	-	10^{2}
5.	Streptococcus	10^{1}	10^{4}
6.	In fungal candidiasis	10^{3}	10^{6}
7.	Protey	10^{3}	10^{6}
8.	Klebsiella	10^{3}	10^{7}

TABLE №2

№	Micro-organisms	Normal	In the patient
1.	Bifidobacteria	10^{10}	10^{1}
2.	Lactobacterin	10^{7}	10^{3}
3.	Enterococci	10^{5}	10^{5}
4.	Staphylococcus	-	10^{1}
5.	Streptococcus	10^{1}	-
6.	In fungal candidiasis	10^{3}	10^{5}
7.	Protey	10^{3}	10^{3}
8.	Klebsiella	10^{3}	10^{6}

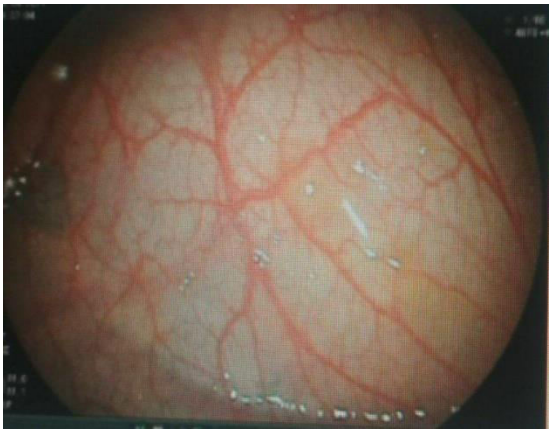
TABLE №3

№	Micro-organisms	Normal	In the patient
1.	Bifidobacteria	10^{10}	10^{3}
2.	Lactobacterin	10^{7}	10^{2}
3.	Enterococci	10^{5}	10^{5}
4.	Staphylococcus	-	-
5.	Streptococcus	10^{1}	10^{3}
6.	In fungal candidiasis	10^{3}	10^{4}
7.	Protey	10^{3}	10^{4}
8.	Klebsiella	10^{3}	-

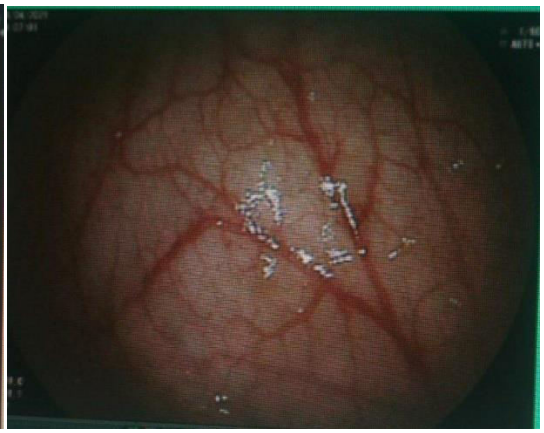
As can be seen from the above tables, the analysis showed that the number of Escherichia coli, bacteroids, staphylococci and klebsiella increased compared to the norm, while the number of bifidobacteria and lactobacilli decreased compared to the norm.

The histostructure of the mucosa by biopsy was studied, along with the study of macroscopic changes in the sigmoid colon mucosa by colonoscopy of 18 of these patients. According to the results of the study, the proliferation of hemispherical folds in the mucosa, the absence of cylindrical epithelial cells in some areas, a decrease in the number of capillary cells, a decrease in the number of subcortical basal vessels (capillaries), obvious signs of dilatation , thinning of the mucous membrane relative to the norm, atrophy of the fibers of the mucous membrane, mucous membrane and muscle layers (circular and longitudinal) were observed.

Picture 1

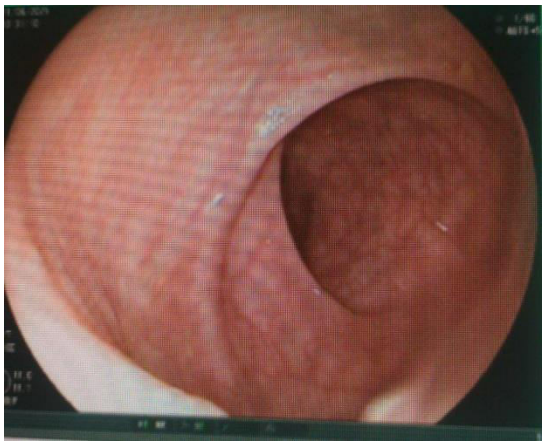


Picture 2



Picture 3

Picture 4



All of the above changes indicate that there are factors that negatively affect the physical development of children with dolichosigma. As a result, it was observed that the lag in anthropometric indicators varied in patients of different ages. When analyzing the height of patients with dolichosigma: in 63 (42.1%) of the 150 patients studied, they were behind the norm, in boys - 32 (50.7%), in girls - 31 (49.2%), by weight Out of 150 patients, 106 (70.6%) were left behind, 66 in boys (62.2%) and 40 (37.7%) in girls.

In the conservative treatment of dolichosigma, regimen and diet also play a significant role in the prevention of defecation disorders. There are also inpatient physiotherapy treatments, vitamin therapy, abdominal massage and treatment in sanatoriums. We used a special device (catheter) to correct dysbacteriosis detected in dolichosigma disease. After the cleansing enema, a special

device (catheter) was inserted into the rectum through the anus to the designated place and after making sure that it reached the sigmoid colon, bifidobacterin and lactobacillin were dissolved in warm distilled water and the dissolved mixture was injected through the catheter into the sigmoid colon (900 in the morning). After 10-12 hours, these patients were again injected through the anus with a special device (catheter) into the rectum, and depending on the age of the patient were sent 10-15 ml of pumpkin oil with a syringe. The above treatments were performed in each patient for 10 days. After the treatment, the patient's stool was examined in a bacteriological laboratory and positive results were obtained. When analyzing the feces of patients, it was observed that the number of bifidobacteria and lactobacilli was restored (increased) and the number of pathogenic microflora decreased sharply.

Based on the results obtained, it is advisable to carry out the above procedures to eliminate the morphofunctional changes of the colon caused by dolichosigma disease in children, constipation and the observed symptoms of dysbacteriosis.

CONCLUSIONS

1. Anthropometric indicators of physical development were studied for the first time in a comprehensive analysis of the complications of dolichosigma disease in the sigmoid colon of 150 patients studied.

2. In 18 of the 150 patients treated, histomorphological examination of the biopsy obtained during colonoscopy revealed inflammation, destructive and atrophic changes in the mucous, submucosal and muscular layers of the sigmoid colon. By applying a new method of conservative treatment, it was possible to eliminate the changes in these identified pathological processes.

3. Based on the dynamic analysis of clinical biochemical and bacteriological examinations of the studied patients for the first time, 28 patients were able to restore morphofunctional changes and eliminate dysbacteriosis by transferring bifidobacteria and lactobacilli to the inner wall of the sigmoid colon through a special device (catheter).

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