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Modern Diagnosis and Treatment of Chronic Colostasis in Children

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ABSTRACT

As a result of a comprehensive follow-up of 220 children with colostasis (aged 8 months to 14 years), organic (Hirschsprung's disease -20%) and functional (megarectum -45.8%; megarectum megacolonoma 21.7%; dolichosigma 12.5%) etiology of the disease were revealed. Surgical methods of treatment were used in organic etiology, while various methods of conservative treatment were used in functional diseases.

Keywords: *Chronic colostasis, surgical, conservative treatment, children*

1. INTRODUCTION

Resume,

Complex observation of 220 children with colostasis (age from 8 months to 14 years) revealed organic (Hirschsprung disease - 20%) and functional (megarectum - 45.8%; megarectum with megacolon - 21.7%; dolichosigma - 12.5%) etiology of the disease. Surgical methods of treatment were used in organic etiology, while different methods of conservative treatment were used in functional diseases.

Topicality

Chronic colostasis (XK) in children is a common symptom in the practice of a pediatrician and pediatric surgeon [l, 5, 7]. Diagnostic tactics provide for the exclusion of extraintestinal (endocrine, neurological, psychogenic, toxic) and organic intestinal causes of constipation. However, in most patients, the diagnosis fails to identify the etiological causes of CC. In such cases, colostasis is considered idiopathic or functional [8, 9]. The results of studies of patients with CH suggested the simultaneous presence of several pathogenetic mechanisms of the disease development [2, 5, 9]

The aim of the work was to study the etiology and pathogenesis of CC in children

2. MATERIAL AND METHODS

In 2015-2020. In the Department of General Surgery of the Andijan Oblast Children's Multidisciplinary Medical Center, 220 children (boys - 149, girls - 91) aged from 6 months to 18 years with complaints of chronic colostasis were examined. Along with the generally accepted clinical and laboratory studies, contrast irrigoscopy with irrigography (230), examination of the rectoanal inhibitory reflex (80), rectomonometry (80), electromyography from the erector muscles of the back (106) were used. Irrigoscopy with irrigography was carried out according to the method of A.I. Lyonyushkin [4|. Irrigograms were used to assess the width of the rectum, the length and width of all colon sections, the preservation of the haustric pattern and the degree of emptying of the colon from the contrast agent.

The examination of the rectoanal reflex according to M.D. Levin [3] consisted in recording the reaction of the morning anal sphincter in response to balloon inflation in the rectum. Rectotonometry was performed by fractional filling of the balloon in the rectum with a liquid of 20 ml

In most cases, constipation began before the age of one year (in 108) and from one to 3 years (in 97). Later, episodes of fecal incontinence were noted, and the fate of patients was the complete absence of independent defecation acts and constant involuntary passage of fecal masses (encopresis). Often, this symptom served as a reason to seek medical help. The patients complained mainly of rare spontaneous defecation at intervals of 14 days (72.5%), changes in the nature of stool 2 (68.33%), involuntary passage of feces against the background of constipation (55.83%), impaired urge to defecate (51.67%), the need to use laxatives or enemas (51.67%). Objective examination revealed retardation in physical development in 93 patients,

pallor of the skin in 128, increase in the size of the abdomen in 118, expansion of the colon loop in combination with fecal stones in 116 patients (42 patients), absence of the skin-anal reflex in 55 patients, expansion of the rectal ampulla, and narrowing in 81 patients. Anomalies of the lumbar cruciate region in the form of asymmetry of the intergluteal fold were revealed in 78 patients, skin dimples in 70 patients, epithelial-coccygeal passage in 3 patients, and pigment spots in 3 patients

Contrast irrigoscopy revealed narrowing of the rectum with suprastenotic dilation (84), its dilation (115), widening of the rectum in combination with dilation and lengthening of the sigmoid colon (86), and lengthening of the latter (75). Clinical and X-ray examination showed the presence of Hirschsprung's disease (in 84), megarectum (in 115) or megarectum with megacolon (in 76) and dolichosigma (in 75) Hirschsprung's disease began to develop in children in the neonatal period. The disease manifested itself in rare independent defecations, which forced me to resort to enemas and laxatives. Objectively, there was a delay in physical development, an increase in the volume of the abdomen, an empty and narrowed ampoule of the rectum on rectal examination

Due to the young age of children with Hirschsprung's disease, the performance of manometric studies and electromyography was sharply difficult, and the data obtained were uninformative The beginning of the development of megarectum and megacolon (131) occurred mainly at the age of one to 4 years. There were complaints of weakening or absence of the urge to defecate, changes in the nature of the stool (dense and wide), involuntary passage of feces against the background of constipation. Objective signs of pathology were the presence of an enlarged loop of the colon and fecal stones, an enlarged rectal ampoule filled with feces. According to electromyography, patients with megarectum, megarectum and megacolon revealed a predominantly segmental level of innervation disorders. According to manometric studies, 99 patients showed a decrease in the rectoanal reflex, 85 patients had a decrease in rectal pressure, 88 patients showed rectal sensitivity, clinical data and results of neurological examination (anomalies in the projection of the lumbosacral region, absence of the skin-anal reflex) together with the data of additional examination methods (spinal dystrophies on radiographs, segmental changes in myograms, rectal sensitivity disorders) It was possible to establish in 106 patients a latent form of myelodysplasia of the spinal cord with impaired function of the pelvic organs. In the remaining 95 patients, the causes of the disease were not revealed, idiopathic megarectum and megacolon were diagnosed.

Dolichosigma (75) developed in children aged one to 18 years. Patients complained of pain in the lower abdomen associated with stool retention, a decrease in the frequency of spontaneous defecation, and changes in the nature of the stool (fragmented). An objective examination did not reveal any noticeable external deviations. According to electromyography, suprasegmental and mixed types of myograms were recorded. The rectoanal reflex and sensitivity of the rectum were not impaired. Patients with Hirschsprung's disease underwent De La Torre Ortega proctoplasty. In patients with megarectum, megacolon and dolichosigma, conservative treatment was carried out by cleansing the intestines of fecal masses, developing regular acts of defecation with the help of enemas, using a laxative diet and physiotherapy (electrical stimulation of the intestine), including massage with the front of the brooch wall and therapeutic exercises. If the latent form of myelodysplasia of the lumbosacral spine was confirmed, courses of treatment prescribed by a neurologist were carried out (contrast enemas, physiotherapy aimed at improving blood supply in the lumbosacral spine, vitamin therapy).

Treatment outcomes were assessed at 6 months to 4 years. Good results were considered to be the presence of spontaneous defecation, the absence of involuntary fecal discharge and intestinal dilation on palpation, satisfactory episodes of stool retention and involuntary fecal discharge, lack of dilatation of the colon on examination, unsatisfactory - constant absence of independent stool and involuntary fecal discharge, persistent dilatation of the large intestine. In the summary assessment of the results of conservative treatment of patients with megarectum, megarectum with megacolon and dolichosigma, good treatment results were obtained in 137 (62.27%) patients, satisfactory - in 75 (34.09%), unsatisfactory - in 8 (3.63%). Patients with unsatisfactory results of long-term conservative therapy and persistent dilatation of the colon were operated on (resection of the enlarged part of the colon and proctoplasty according to Lenyushkin): good results in 5 patients, satisfactory results in 2 patients, and unsatisfactory results in one.

3. FINDINGS

1. The true causes of chronic constipation in children can be established only by a comprehensive examination using radiopaque irrigoscopy with irrigography, rectotonometry and electromnography.

2. Chronic constipation in summers is polyetiological and may be a consequence of Hirschsprung's disease (20%). metarectum (45.8%), megarectum with megacolon (21.7%) and dolichosigma (12.5%).

In patients with megarectum, megarectum with megacolon and dolichosigma B, concomitant neurological diseases or anomalies of the spine were detected in 47.9% of cases.

3. In case of Hirschsprung's disease, the most effective is a one-stage surgical treatment of De La Torre - Ortega. Patients with megarectum, megarectum with megacolon and dolichosigma need mainly conservative treatment (91.17%). Operative treatment – Hemicolectomy 9.83%

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