PRINCIPLES OF CONSERVATIVE AND SURGICAL TREATMENT OF CHRONIC COLOSTASIS

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Abstract*. Colostasis (CS) or chronic constipation (CC) is a heterogeneous pathology. The term "constipation" cannot be used to refer to an independent disease. This concept combines a complex of general and gastrointestinal symptoms.*

The authors, during the study, conclude that the principles of conservative therapy and the principles of surgical treatment of CS have been optimized. At the same time, surgical tactics should be based on the severity, duration of medical history, gender, as well as concomitant therapeutic pathology, i.e. should be active diagnostic and individual when choosing the volume of colon resection and methods of forming interintestinal anastomoses.

Keywords*: colostasis (CS), chronic constipation (CC), dolichosigma, dolichocolon, hemicolonectomy, colectomy.*

Relevance of the problem. Colostasis (CS) or chronic constipation (CC) is a heterogeneous pathology. This concept combines a complex of general and gastrointestinal symptoms [5]. Constipation is considered to be bowel movement less than 3 times a week [3], with a disease duration of at least 3 months [2]. A number of researchers are supporters of conservative therapy [7;9], however, every fourth patient does not note a sufficient positive effect, which forces them to seek help from a surgeon [6]. However, the results of surgical treatment are overshadowed by the high frequency of unsatisfactory functional results, which reach 27.3-45.9% [3;4;8]. The implementation of these tasks, including the optimization of surgical tactics for chronic CS, is one of the current areas of coloproctology and medicine in general.

The aim of the research is to improve the results of surgical treatment of chronic colostases by optimizing the principles of surgical treatment, as well as preoperative preparation and postoperative management.

Material and research methods. An analysis of the results of examination and treatment of 396 patients suffering from chronic constipation (colostasis) who were undergoing inpatient treatment in the coloproctology department of the Department of Surgery and Civil Defense of the Andean State Medical Institute and the Ellikkala District Medical Association of the Republic of Koracalpogiston was carried out.

The sample of patients upon admission was conditionally divided into two groups:

- comparison group – 172 (43.4%) patients with CS in the period from 2015 to 2018, the treatment of which was limited to subsequent standard patient management.

- main group - 224 (56.6%) patients with CS operated on in the period 2019 to 2023, who used an improved treatment and diagnostic algorithm.

To achieve the goal and objectives of the study, general clinical, laboratory, biochemical, instrumental and statistical research methods were carried out according to protocols approved by the Ministry of Health of the Republic of Uzbekistan and Koracalpogiston.

Results and its discussion. All patients were distributed by age according to the International Age Classification, WHO [2021]. When analyzing the incidence of CS, a

predominance of patients aged 18-44 years (young age) - 163 (72.7%), and 45-59 years old (middle age) - 74 (33.0%) was revealed. Patients aged 60 and 74 years (elderly) accounted for 47 (21.0%), from 75 to 89 years (senile age) - 14 (6.3%). There were no patients over 90 years old in the main group. The incidence rate depending on gender was noted, the prevalence of female patients was 74.5% (169 patients), while men accounted for only 25.5% (55 patients).

Table 1

Distribution of patients by gender and age

Years old	GROUPS (n=224)					
	Men		Women		Total	
	abs	%	abs	%	abs	%
-19-44	22	9,8	67	29,9	89	39,7
-45-59	17	7,6	57	25,4	74	33,0
-60-74	13	5,8	34	15,2	47	21,0
-75-89	3	1,3	11	4,9	14	6,3
Total:	55	25,5	169	74,5	224	100

When analyzing the duration of the presence of CS, the majority of patients - 110 (49.1%) were admitted before 1 year from the onset of clinical symptoms of the disease. But nevertheless, there were patients with disease duration from 1-5 years - 68 (30.4%) and from 6 to 10 years - 30 (13.4%). At the same time, the duration of CS for more than 10 years, noted in 16 (7.1%) patients, played a significant role in the development of unfavorable conditions and the increase in the number of complications in the pre- and postoperative period.

In the comparison group, constipation as the main symptom of the disease was noted in 217 (96.9%) patients. Abdominal pain without clear localization was detected in 75 (33.5%) patients. More than half of the patients did not associate pain with the rhythm of bowel movements. Since the frequency of bowel movements was relatively satisfactory at intervals of no more than 3 days.

Table 2

Features of clinical symptoms of CS

Clinical symptoms	Total n=224	
	abs	%
constipation	217	96,9
abdominal pain	75	33,5
bloating	63	28,1
intoxication (nausea, bad breath, etc.)	110	49,1
fecal stones	17	7,6

Abdominal bloating was noted in 63 (28.1%) patients. At the same time, an increase in the abdomen in the form of a “frog” was observed, which, due to high intra-abdominal pressure due to overfilling of the intestine and overstretching of the intestinal wall with gases, caused a high standing of the diaphragm, causing difficulty breathing. It should be noted that the presence of symptoms of intoxication in 110 (49.1%) patients, which was manifested by fatigue, weakness,

irritability, sweating, unstable mood, headaches, poor sleep, memory loss, constant heaviness in the abdomen, lack of appetite, “putrefactive » bad breath, nausea, in some cases vomiting and aversion to food. Fecal stones were observed in 17 (7.6%) patients.

Table 3

Distribution of patients by type of CS

The nature of colonic stasis	T	
	abs	%
-functional constipation	45	20,1
-transient constipation	31	13,8
-mixed	148	66,1
Total:	224	100

Functional constipation resulting from a violation of the reservoir and evacuation functions of the rectum and its closure apparatus was identified in 45 (20.1%) patients. Transient constipation, characterized by a slower rhythm of bowel movements, was noted in 31 (13.8%). The largest number were patients with mixed forms of constipation - 148 (66.1%).

Barium sulfate passage time of up to 1 day was detected in 32 (14.3%) patients, up to 2 days in 47 (21.0%). At the same time, 39.3% (96) of patients were treated with barium sulfate for up to 3 days. However, there were patients with the achievement of contrast in the colon for more than 3 days, noted in 57 (25.4%) patients. The presence of concomitant therapeutic pathology worsened the course of the underlying disease and also caused difficulties in determining treatment tactics.

Among the concomitant therapeutic pathologies, the leading ones are cardiovascular diseases 63 (28.1%). Thus, ischemic heart disease was diagnosed in 18 (8.0%) patients, angina pectoris and atherosclerosis in 16 (7.1%) patients, diabetes mellitus in 9 (4.0%), and various forms of obstructive pulmonary diseases were diagnosed in 4 (1 .8%) patients. It should be noted that there is a relatively high rate of hypertension, which was diagnosed in 29 (13.0%) patients.

Principles of conservative treatment. In the process of determining treatment tactics for patients with chronic CS, it was recommended to keep track of stool frequency, consistency and shape of stool (according to the Bristol scale), taking medications, and following a diet, which allows assessing the effectiveness of therapy. At the initial stage of treatment, changes in diet and lifestyle (optimizing dietary fiber and fluid intake and encouraging regular physical activity) are carried out for all forms of CS. Diet therapy is a trigger in the treatment of chronic constipation of nutritional and functional origin and one of the stages in the treatment of chronic constipation of organic origin, which has improved the results of surgical treatment of this pathology.

Restoring the regular act of defecation at a certain time can be done with the help of “irritating” suppositories, creating a calm, comfortable environment during defecation. To maintain intestinal motor activity, food must be eaten regularly (4-6 times a day) with a volume of at least 2 liters per day. The menu should include coarse insoluble fiber, which enhances intestinal motility. It is recommended to take fermented milk products that regulate intestinal motility. Boiled vegetables and vegetable fats have proven themselves. Along with dietary measures, dietary supplements containing fermentable and non-fermentable dietary fiber are recommended. Principles of surgical treatment. When choosing the method of CS surgery for each specific patient, we approached it individually, taking into account the current situation during the operation, i.e. surgical finding. We believe that this contingent should be operated on by surgeons

with extensive practical experience in abdominal coloproctology surgery. Attention should be paid to the presence of megacolon, dolisochisgma or a combination thereof), the presence of complications and concomitant surgical and concomitant therapeutic pathology.

When planning operations, the patient's preparation is the same - a slag-free diet is prescribed for 1-2 days; on the eve of the operation, a mechanical cleansing of the large intestine is performed, which has several methods. We used a combined method of cleansing the large intestine: the evening before the patient was prescribed 2 sachets of the drug Fortrans + 2 liters of water, cleansing enemas the evening before (2) and in the morning (2) before surgery.

The presence of concomitant diseases required additional therapeutic measures in the preoperative and postoperative periods.

For the prevention of thromboembolic complications (TEC), Clexane or Fraxiparine 0.4-0.6 units were used according to indications. The treatment complex, according to indications, also included cardiac glycosides, cocarboxylase 150 mg per day, thiotriazoline 2.5%-4.0; B vitamins, ascorbic acid. The leading place was occupied by the fight against infection. For this purpose, broad-spectrum antibiotics and sulfonamides were used in combination with immunostimulating therapy.

Management of the postoperative period should be considered as a continuation of a single program of therapeutic measures begun during preoperative preparation and the operation itself. In the postoperative period, along with rational infusion and antibacterial therapy, as well as the administration of painkillers, great importance was given to early stimulation of intestinal motility, nutrition, early activation of the patient and the prevention of thromboembolic complications.

Our main goals after the operation were to normalize the motor activity of the colon due to various types of contractions of the intestinal wall, normalize the passage of feces, restore the feeling of urge to defecate, and reduce asthenovegetative disorders.

The leading indications for surgical treatment were dolichosigma, detected in 80 (35.7%) patients. At the same time, left-sided dolichocolon was diagnosed in 42 (18.7%), right-sided dolichocolon in 21 (9.4%) and megacolon in 36 (16.1%) patients. However, other forms leading to chronic constipation were also diagnosed with functional disorders in 45 (20.1%) patients who underwent conservative treatment with successful results.

Table 4

Indications for surgical treatment of CS

Indications for surgical treatment	T	
	abs	%
-Megacolon	36	16,1
-Dolichosigma	80	35,7
-Left-sided dolichocolon	42	18,7
-Right-sided dolichocolon	21	9,4
-Norm	45	20,1
Total:	224	100

Among patients with CS, the largest number were patients with resection of the sigmoid colon - 84 (47.0%).

Subtotal colonectomy was performed in 35 (19.5%), left hemicolectomy was performed in 39 (21.8%) patients, and right hemicolectomy was performed in 16 (8.9%). Colonectomy was performed in only 5 (2.2%) patients.

Table 5

The nature of the surgical interventions performed

Nature of the operation	T	
	abs	%
-Colonectomy	5	2,8
-Subtotal colonectomy	35	19,5
-Resection of the sigmoid colon	84	47,0
-Left-sided hemicolectomy	39	21,8
-Right hemicolectomy	16	8,9
Total:	179	100

Conclusion. Thus, during the research, the principles of conservative therapy and the principles of surgical treatment of CS were optimized. At the same time, surgical tactics should be based on the severity, duration of medical history, gender, as well as concomitant therapeutic pathology, i.e. should be active diagnostic and individual when choosing the volume of colon resection and methods of forming interintestinal anastomoses.

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