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CHOICE OF TREATMENT FOR CROHN'S DISEASE OF THE COLON

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ABSTRACT

Objectives. To improve the results of surgical treatment of Crohn's disease of the colon by applying modern diagnostic methods and adequate surgical tactics.

Scientific novelty. The main modern diagnostic and surgical methods for the treatment of Crohn's disease of the colon are highlighted. It has been established that in Crohn's disease of the colon, the operation of choice is total colectomy, anterior resection of the rectum with the formation of an ileorectal anastomosis using circular staplers. At the same time, the frequency of postoperative complications decreases to 12.7%.

Materials and Methods. The study included 84 patients who underwent conservative and surgical treatment in the proctological department of the 1st Republican Clinical Hospital of the Ministry of Health of the Republic of Uzbekistan. for the period from 2010 to 2022 for Crohn's disease of the colon. Of these, 53 (63%) were men, 31 (37%) were women. The age of the patients ranged from 15 to 61 years. The average age was 37.1+1.2 years.

Results. Indications for surgery for Crohn's disease of the colon are a total lesion of the inflammatory-ulcerative process, the presence of intestinal and extra-intestinal complications, the ineffectiveness of conservative therapy and the progression of the disease.

Key words: intestinal fistulas, fistulography, irrigation, ileostomy, closure of the fistula.

INTRODUCTION

Crohn’s disease is a chronic inflammatory bowel disease with a transmural lesion pattern, predominantly affecting the distal part of the ilium and colon, in which any section of the gastrointestinal tract may also be affected [1,5,8,12,13].

Global prevalence ranges from 30 to 50 per 100,000 population [2.5.7]. Colon lesions occur in about 20% of all cases of Crohn's disease, and total lesions occur in 15% of cases.

Despite the introduction of new regimens of conservative treatment of non-specific inflammatory diseases - ulcerative diseases of the intestine, 20-30% of patients with ulcerative colitis and 50-60% of patients with Crohn's disease have indications of surgical treatment during their lifetime [2.3]. Therefore, today the issues of surgical treatment of inflammatory ulcers of the colon are increasingly attracting the attention of surgeons. This is due not only to the increase in the number of cases, but also to the lack of a common view of surgical treatment tactics. If 28-30% of patients suffering from chronic inflammatory diseases of the intestine need surgical treatment, then in severe pathological process, especially in acute forms or total lesions, it is shown by almost 60% of patients [5,6,7].

Late diagnosis and inadequate treatment of inflammatory ulcers of the intestine, which include Crohn's disease, ulcerative colitis, lead to a high incidence of complications, mortality and disability of persons of working age [4.9].

Materials and Methods.

The study included 84 patients, who carried out conservative and operative treatment in the RSCPRUs. Between 2010 and 2022, it was reported that Crohn had a colon disease. Of these, 53 (63 per cent) were men and 31 (37 per cent were women). The average age was 37.1+1.2 years. Table. 1

Table 1

Distribution of patients by sex and age.

	Sex	Number of patients in age groups					
	Age	15-20 year	21-40 year	41-60 year	61 and elder	Obs	%
1	Male	1	29	22	1	53	63
2	Female	7	16	7	1	31	37
3	Total	8	45	29	2	84	100

As can be seen from the table, Crohn's colon disease is most common in people of working age.

In addition to general clinical laboratory studies, diagnostics were carried out using rectoroscopy, colonoscopy, irrigraphy, ultrasound examination of the small intestine and colon, and the colon microflora was studied. If necessary, virtual colonoscopy, computed tomography of the abdominal organs, intraoperative colonosophyboscopy were used. During the colonoscopy, all patients were

biopsied from the most affected sections of the colon. Endoscopic data were compared to morphological bioptat data.

Results and discussion. The analysis of the directional diagnoses found that out of 84 patients, only 18 (21.4 per cent) were correctly diagnosed with Crohn's disease, while the rest were referred to a clinic with various abdominal diseases. Difficulties arose in the differential diagnosis of non-specific ulcerative colitis and Crohn's disease, as these diseases have very similar clinical symptoms [5, 6].

The heterogeneity of the clinical picture, the similarity of the symptoms of Crohn's disease and other inflammatory - ulcerative diseases of the intestine or the course of the disease without gastrointestinal symptoms (extraintestinal symptoms only) make it difficult to determine the diagnosis of Crohn's disease [5].

Analysis of the data obtained showed that 12 (14.3 per cent) had mild disease, 14 (16.6 per cent) had mild disease, 54 (64.3 per cent) had mild disease and 4 (4.7 per cent) had lightning.

Depending on the extent of the lesion, the pathological process revealed the following: table. 2

Table 2

Containment of pathological lesions

№	Duration of pathological lesions	Number of pain	%
1	Total colon lesion	57	68
2	Subtotal defeat	12	14,3
3	Left injury	7	8,2
4	Segmental lesion	5	6,0
5	Distal lesion (erosive ulcerative proctitis, proctosigmoiditis)	3	3,5
	Total	84	100

As shown in Table 2, we are often diagnosed with subtotal (14.3%) and total colon (68%) inflammatory - ulcerative process.

Crohn's disease had various complications, which were the main reason for patients seeking medical treatment. In our observations there were the following complications presented in table 3.

Table 3

Complications of Crohn's colon disease. n =84

№	Types of complications	Number of complications Abs.	%
1	Bleeding and post-hemorrhagic anemia	80	95,2
2	Segmental colonic stricture	46	54,7

3	Pseudo polyposis	42	50
4	Intestinal complications (arthritis, pyoderma, conjunctivitis)	17	20,2
5	Toxic hepatitis	16	19
6	Rectal fistula	16	19
7	Anal fractures	6	7,1
8	Toxic dilation of the colon	5	6
9	External intestinal fistula	4	4,7
10	Malignization	2	2,4
	Total	234	

As shown in table 3, the most common complication was intestinal bleeding with posthemorrhagic anaemia - 80(95.2%) patients, 46(54.7%) patients were diagnosed with segmented colonic stricture, complicated by chronic intestinal obstruction. In 42 (50%) patients there is a total lesion of pseudoplastosis of the colon. Intestinal complications in the form of polyarthritis, pyoderma and conjunctivitis were observed - 17 (20.2%) patients. Due to prolonged intoxication, 16(19%) patients are diagnosed with toxic hepatitis. Frequent complications of Crohn's disease are various lesions of the anal region. In our observations, 16 (19%) patients were diagnosed with rectal fistula, anal fractures - in 6 (7.1%) patients. Toxic dilatation of the colon was observed in 5(6%) acute patients. 4(4.7%) patients who perforated sigmoid ulcers developed external intestinal fistula. 2(2.4%) patients tested with large intestine biopsion with malignization of ulcer.

The treatment of Crohn's disease, especially in complicated forms, is a complex issue for both surgeons and gastroenterologists. Late diagnosis and inadequate treatment of non-specific inflammatory diseases of the intestine, which include Crohn's disease, lead to a high incidence of complications and mortality [9]. There is an opinion that it is necessary to intervene earlier from the onset of the disease. In this case, the earlier the patient is operated, the better the results of surgery.

The most radical method of surgical treatment to achieve complete cure of patients is colproctectomy. But with patients in serious condition, first of all, it is necessary to think about saving the life of the patient, and such radical surgery is not always possible. In addition, colproctectomy with the formation of ileostoma results in disability of persons of working age. Therefore, taking into account that the average age of operated patients is 25-35 years, surgical assistance should solve the problems of not only medical, but also social and labor rehabilitation.

The development and wide introduction of modern suturing devices made it possible to apply anastomosis in the depth of the pelvis and made it possible to form it at any distance from the anus edge, including the anal channel [10].

The reconstructive interventions currently used for colon crohn disease include colectomy with the formation of ileorectal anastomosis, colectomy and anterior rectal resection with or without the addition of low or ultra-low ileorectal anastomosis. In addition, if necessary, colproctectomy is performed with the formation of a single-barrel ileostoma or colproctectomy with various variants of ileorectal anastomosis. Many surgeons believe that the best results are achieved in colectomy with ileorectal anastomosis [4,11,13].

In our clinic 14 (16.6%) patients were treated only conservatively, the remaining 70 (83.4%) patients depending on the length of the pathological process, complications, performed surgical interventions. Indications for surgical treatment were: total colon lesion by inflammatory ulcers, accompanied by severe intoxication, cachexia, massive bleeding; colon perforation, complicated by spilled peritonitis, external intestinal fistula, toxic dilation; intestinal stricture throughout; malignation, pseudo-polyposis, inefficiency of conservative therapy and progression of the disease, the development of intestinal complications.

In the pre-operative period, hemostatic therapy, blood loss replacement, protein preparations, electrolytes, detoxification, antibiotic therapy, treatment of related diseases were carried out.

The types of operations performed in the case of Crohn colon disease were as follows: Table. 4

Table 4

Types of surgical interventions for Crohn colon disease. n=70

№	Types of operation	Quantity Abs.	%
1	Total colectomy, front rectal resection with low ileorectal anastomosis by circular suturing device	32	45,7
2	Total colectomy, anterior rectal resection with ultra-low ileorectal anastomosis with circular suturing device and double-directional preventive ileostomy	14	20
3	Total colectomy, front rectal resection with rectal and single-barrel ileostoma cult	5	7,2
4	Colproctectomy with ilioanal anastomosis	3	4,3
5	Colproctectomy with single-barrel ileostoma formation	2	2,8
6	Left-handed hemicolectomy with transverse anastomosis and double-barrelled ileostoma	3	4,3
7	Double-barrelled preventive ileostomy	7	10
8	Single-barrel colostomy with rectal cult formation	4	5,7
Total		70	100

As shown in table 4, total colectomy, anterior rectal resection with low ileorectal anastomosis by circular suturing apparatus is performed in 32 (45.7%) patients. All patients were diagnosed with total colon lesion, complicated by pseudo-polyposis, chronic bleeding. In these patients, the inflammatory ulcer process in the rectum was less pronounced. Therefore, preventive ileostoma was not applied.

14(20%) patients have been diagnosed with total inflammatory ulceration and especially direct and sigmoid bowel. On this basis, total colectomy, anterior rectal resection with ultra-low ileorectal anastomosis by means of a circular suturing apparatus were performed on these patients, and preventive double-barrel ileostoma was added. Four to six months after the improvement of the condition of the patients, the silvery was closed.

5(7.1%) patients who had a total lesion of the colon ulceration, stricture due to the scarring process of the upper rectum produced total colectomy, anterior rectal resection with single-stem silostomy and rectal culturing. Subsequently, patients received general and local antiulcer treatment for rectal stumps. Following the elimination of the inflammatory process in the rectum and the improvement of the general condition of the patients, the second stage of the operation was carried out - the application of a low ileorectal anastomosis using a circular suturing machine with a satisfactory result.

3(4.3%) patients who have been diagnosed with a pronounced ulcerative process of the colon and rectum, complicated by chronic intestinal bleeding, pseudo-polyposis, extended intestinal stenosis, produced a total colproctectomy with the imposition of ileoanal anastomosis. One patient in the postoperative period had diarrhoeal syndrome - stool up to 20 times a day. The patient was given infusion therapy, diets, probiotics. The condition gradually improved. Stool frequency decreased to 6-7 times a day. The patient is discharged in satisfactory condition.

2(2.8%) patients due to the severity of the inflammatory ulcer process of the colon, the rectal stenosis is a total colproctectomy with the formation of single-barrel ileostoma.

In 3(4.3%) patients there was left colon inflammatory ulcer lesion, but less pronounced in the rectum. Therefore, these patients performed a left-handed hemicolectomy with the application of a transient anastomosis by means of a circular suturing device. In addition, it has a preventive double-stroke ileostomy. In these patients, too, after 6-7 months after the condition has improved, the iliostoma has been closed.

7(10%) patients due to the severity of the condition due to pronounced hypoproteinemia, violation of water-electrolytic metabolism, anemia and cachexia, as the first stage of the operation, preventative bipartite ileostoma is applied. All patients have undergone a radical surgery after improving their condition.

4(5.7%) of patients had external intestinal fistula due to perforation of sigmoid and descending colon, complicated by diffuse purulent peritonitis. So these patients had sigmoid intestine resection, a single-barrelled bell and a rectal cult.

The following complications occurred in the early postoperative period: Table. 5

Table 5

Nature of postoperative complications of Crohn's colon disease, n=70

№	Complication pattern	Quantity Abs.	%
1	Incompetence of intercostal anastomosis	6	8,5
2	Paracolostomy suppuration	2	2,8
3	Diarrheal syndrome	1	1,4
	Total	9	12,7

For 6 (8.5%) patients for 6-7 days after the operation, there was a partial insolvency of ileorectal anastomosis. Two of them had a defect in the intercostal anastomosis that closed without repeated surgery. Three of these patients have been relaparotomized, anastomosis separated into a single-barrelled ileostoma and short rectal stump. The condition of these patients improved and after four to six months they underwent restorative surgery. One patient, despite a relalaparotomy performed in a timely manner with the formation of a single-barreled ileostoma, the rehabilitation of the abdomen, came to death. In 2 patients, suppuration of the paracolostomic region was observed. One patient had diarrheal syndrome after colproctectomy with the formation of the ileoanal anastomosis. After drug therapy, diet therapy and probiotics, the condition has improved, stool 6-7 times a day, discharged in a satisfactory condition for outpatient treatment.

Thus, the indications for surgical treatment are: the ineffectiveness of conservative therapy and progression of the disease, the occurrence of severe complications in the form of profuse bleeding, intestinal perforation, toxic dilation, intestinal stricture and malignation. The selection operation is a total colectomy, anterior rectal resection with the formation of interintestinal anastomosis using circular-stitching devices.

Conclusion:

1. Indications for surgery in case of Crohn colon disease are total lesion of the inflammatory ulcer process, presence of intestinal and intestinal complications, ineffectiveness of conservative therapy and progression of the disease.

2. The choice procedure for Colon Crohn disease is a total colectomy, anterior rectal resection with the imposition of ileorectal anastomosis using circular stitching devices. The use of circular-stitching apparatuses in the creation of ileorectal anastomoses reduces the duration of the operation by 30+2.5 minutes. decreases the incidence of post-operative complications to 12.7%.

3. In the case of extremely serious patients, it is advisable to resort to the operation of bowel disconnection in the form of preventive ileostomy. This allows you to remove the patient from a serious condition, and then perform a radical operation.

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