

# Indicators of Surgical Rehabilitation and Quality of Life of Patients with Intestinal Stoma

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**Abstract** The article details the history of the development of surgical proctology from the moment colostomy appeared, the imposition of anastomoses, and the stages of surgical treatment of stoma patients. Methods and results of rehabilitation of stoma patients, principles of application and closure of single-double-barreled colostomy, and treatment after surgical complications are discussed. The influence of different methods of surgical treatment on social adaptation and the quality of life of patients is also analyzed.

**Keywords** Rehabilitation, Surgery, Proctology, Colostomy, Social adaptation, Quality of life

## 1. Introduction

An analysis of world literature and the protocols of many medical institutions shows that the formation of a single-barrel colostomy, both as a preliminary stage and as a final version of surgical intervention, is widely used in the arsenal of surgical treatment of diseases and injuries of the colon and rectum. Many surgical interventions end with colostomy formation in more than 50% of cases, preventively in cases of acute intestinal obstruction complications [1,2,3,4,6,7,8,10,11,12,13].

In emergency cases, when surgery was not planned in advance, colostomy formation often leads to a large number of paracolostomic purulent-inflammatory complications. These complications not only prolong hospitalization periods but also require additional surgical interventions, complicating reconstructive operations and making medical, social, and labor rehabilitation of colostomies patients more difficult, significantly reducing their quality of life and potentially leading to fatal outcomes [9,10,11,12,13].

Modern literature notes that stoma patients often develop an inferiority complex until full recovery. Interaction with others can make patients feel stigmatized, leading to isolation and a persistent sense of hopelessness. This inferiority complex often results from insufficient patient information. Psychological exhaustion can also cause physical weakness and malaise, leading to depression, lifestyle changes, and worsened social adaptation, all of which affect quality of life. Psychological support significantly improves social adaptation and quality of life [5].

Among modern surgeons, there are two competing methods: manual techniques for colorectal anastomoses and device-assisted anastomosis formation [10,16].

Proctologists must be familiar with both methods as each patient requires an individualized approach. Currently, quality of life (QoL) is an important, and in some situations, a primary criterion for assessing treatment effectiveness in clinical studies [10,14,15].

QoL reflects the impact of the disease and treatment on patient well-being and characterizes their physical, emotional, and social well-being, which changes under the influence of the disease or its treatment.

**Objective:** To improve surgical rehabilitation outcomes by optimizing reconstructive operations and studying the quality of life, dynamics in patients with intestinal stomas.

## 2. Materials and Methods

We analyzed the results of observations of 397 patients with intestinal stomas from 2012-2019, who were hospitalized at the Republican Clinical Hospital No. 1 of Uzbekistan. All patients underwent standard examination, including clinical examination and instrumental methods: ECG, ultrasound, radiography, esophagogastroduodenoscopy, fibro colonoscopy, recto sigmoidoscopy, digital sphincterometry, proctographic, areography, colonoscopy, diagnostic laparoscopy, and pouch-graphy as necessary.

To exclude abdominal neoplasms and identify other pathologies, magnetic resonance imaging (MRI) and multislice computed tomography (MSCT) with contrast were used as needed. Quality of life was assessed using the European Quality of Life Questionnaire EuroQol-5D and the visual analog scale (VAS) for pain intensity, validated through standard procedures. After diagnosis, all patients underwent surgical intervention—colostomy formation, various anastomoses,

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and other reconstructive operations.

### 3. Results and Discussions

In total, 397 patients with intestinal stomas were studied from 2012-2019. Patients were distributed by age according to WHO classification. The majority were young (18-44 years; 74%), with men predominating over women by 10%.

Patients aged 18-44 comprised 73% of the total, with men constituting 55% and women 45%, attributed to lifestyle factors affecting intestinal function. The analysis showed that diseases mainly affected the working-age population (18-59 years; ~93%), highlighting the importance of this issue.

In our study, in 397 patients, the reasons for ostomy placement were as follows: nonspecific ulcerative colitis 140 (35.3%), intestinal bleeding for various reasons 98 (24.7%), intestinal stricture 30 (7.6%), purulent-inflammatory diseases. intestines and peritonitis 19 (4.8%), ulcerative proctitis 19 (4.8%), abdominal pain syndrome 15 (3.8%), adhesive intestinal disease 14 (3.5%), colon diverticulosis 12 (3 %), Crohn's disease 11 (2.5%), ulcerative proctitis 10 (2.5%), volvulus 9 (2.3%), Hirschsprung's disease 5 (1.3%), abdominal trauma 3, duodenal ulcer intestines with perforation 3 and intestinal amebiasis 2 cases, depending on the cause, various stomas or surgical methods were used.

Based on the severity of the disease, patients were divided into three groups. The first group included 131 (33%) newly admitted patients who underwent colostomy, anastomosis, and other surgical interventions, assessed as having a milder disease course. The second group consisted of 133 (33.5%) patients who had undergone various surgical interventions previously, with moderate disease severity. The third group included 133 (33.5%) patients with severe disease, who had undergone multiple surgeries and continued to have recurrent issues.

Analysis of the treatment types in 397 patients showed the following results: In the first group, anastomosis was the most common procedure (78, 60%); followed by double-barrel stoma (35, 27%); single-barrel stoma (8, 6%); reconstructive surgeries (6, 5%); and conservative treatment (4, 3%). Anastomosis is the preferred surgical method in this group for faster recovery.

In the second group, the most common procedures were: closure of double-barrel stoma (35, 26%); anastomosis (28, 21%); closure of single-barrel stoma (15, 11%); reconstructive surgeries (15, 11%); and conservative treatment (40, 30%). Anastomosis was less common in this group compared to the first, but remained a method of choice. Many patients (30%) received conservative treatment and rehabilitation.

In the third group, the most common procedures were: closure of double-barrel stoma (38, 29%); closure of single-barrel stoma (26, 19%); anastomosis (24, 18%); reconstructive surgeries (15, 11%); and conservative treatment (30, 23%). Anastomosis was performed less frequently in this group compared to the first and second groups, but remained a preferred method of surgical treatment. Conservative

treatment was provided to 22% of patients who continued to suffer and required rehabilitation. Among the 397 patients, 74 (18%) received conservative treatment. In the first group, 4 (3%) patients required conservative treatment after surgery due to signs of intestinal obstruction, which resolved without additional surgical intervention. In the second group, 40 (30%) patients who had previously undergone surgery required conservative treatment, which resolved signs of dynamic intestinal obstruction without further surgery. In the third group, 30 (23%) patients with a history of multiple surgeries required conservative treatment to resolve signs of dynamic intestinal obstruction.

### 4. Conclusions

1. Analysis of observations showed that, the disease of patients comes mainly at the working age of 18-59 years about 93% which makes the problem very urgent.
2. The predominant method of surgical treatment is the application of anastomoses 130 (40%) in all studied groups, the ratio to the total number of patients 33%, in the second place the application and closure of bipolar stoma 108 (33%) out of a total of 27%.
3. A study of 397 patients showed that the most affected parameters of PC pain/discomfort and anxiety/depression were the emotional state of the patients.
4. The visual-analogue scale and its five parameters allow more detailed examination of pain syndrome, absence of pain (0 points), weak pain (1-3 points), moderate pain (4-6 points), very severe pain (7-9 points), unbearable pain (10 points) which means the maximum possible feeling of pain.

### REFERENCES

- [1] Batyrov A.K., Khakimov D.M., Nishanov M.F., et al. / Intestinal Stomas: History and Current State of the Problem (Literature Review) // International Scientific Journal Theoretical & Applied Science. - 2021. - 02 (94). - pp. 283-288.
- [2] Belokonev V.I., Belokonev V.I., Fedorin A.I. / Determining Indications for Anastomosis and Intestinal Stoma Formation in Patients with Peritonitis and Acute Intestinal Obstruction // Avicenna Bulletin. - 2012. - №3. - pp. 30-33.
- [3] Darbishgadzhiev Sh.O., Baulin A.A., Zimin Yu.I., et al. / Structure of Complications in the Formation and Closure of Preventive Ileostomies and Colostomies // Ural Medical Journal. - 2020. - №05 (188). - pp. 81-85.
- [4] Darwin V.V., Ilkanich A.Ya., Voronin Yu.S. / Implementation of an Accelerated Recovery Program in Reconstructive Operations in Stoma Patients // Coloproctology. - 2020. - №1 Vol. 19. - pp. 67-72.
- [5] Deineka N.V. / Psychological Adaptation to Intestinal Stoma // Neurological Bulletin Named after V.M. Bekhterev. - Kazan, 2015. - Vol. XLVII Issue. - pp. 58-63.

- [6] Kosovan V.N. / Reconstructive Operations in Patients with Temporary Double-Barrel Entero- and Colostomies // Ukrainian Journal of Surgery. - 2012. - № 4 (19). - pp. 105-109.
- [7] Stepchenkov R.P. / Main Approaches to Managing Adult Patients with Intestinal Stoma // Handbook of General Practice Doctor. - 2019. - № 5. - pp. 20-45.
- [8] Shelygin Yu.A., Achkasov S.I., Piliev D.V., et al. / Assessment of the Severity of Inflammatory Changes in the Surgical Wound After Closure of Preventive Intestinal Stomas // Clinical and Experimental Surgery. Journal Named After Academician B.V. Petrovsky. - 2016. - Vol. 4. № 2 (12). - pp. 89-95.
- [9] Yanyshv A.A., Bazaev A.V., Abelevich A.I., Lebedeva M.I. / Surgical Treatment of Parastomal Hernias // Medical Almanac. - 2018. - №1 (52). - pp. 76-79.
- [10] Ayaz-Alkaya S. / Overview of Psychosocial Problems in Individuals with Stoma: A Review of Literature // International Wound Journal. 2019 Feb; 16(1): 243-249.
- [11] Cornille J.B., Pathak S., Daniels I.R., Smart N.J. / Prophylactic Mesh Use During Primary Stoma Formation to Prevent Parastomal Hernia // Annals of the Royal College of Surgeons of England. 2017 Jan; 99(1): 2-11.
- [12] Cressey B.D., Belum V.R., Scheinman P., Silvestri D., McEntee N., Livingston V., Lacouture M.E., Zippin J.H. / Stoma Care Products Represent a Common and Previously Underreported Source of Peristomal Contact Dermatitis // Contact Dermatitis. 2017 Jan; 76(1): 27-33.
- [13] Doud A.N., Levine E.A., Fino N.F., Stewart J.H., Shen P., Votanopoulos K.I. / Stoma Creation and Reversal After Cytoreductive Surgery with Hyperthermic Intraperitoneal Chemotherapy // Annals of Surgical Oncology. 2016 Feb; 23(2): 503-10.
- [14] Kita Y., Mori S., Tanabe K., Baba K., Tanoue K., Idichi T., Wada M., Arigami T., Sasaki K., Maemura K., Natsugoe S. / Clinical Prospects for Laparoscopic Stoma Closure of a Temporary Loop Ileostomy: Initial Experience and Report // Asian Journal of Endoscopic Surgery. 2020 Oct; 13(4): 618-621.
- [15] Li L.T., Hicks S.C., Davila J.A., et al. / Circular Closure is Associated with the Lowest Rate of Surgical Site Infection Following Stoma Reversal: A Systematic Review and Multiple Treatment Meta-Analysis // Colorectal Disease. 2014. - Vol. 16. - pp. 406-416.
- [16] Nelson T., Pranavi A.R., Sureshkumar S., Sreenath G.S., Kate V. / Early Versus Conventional Stoma Closure Following Bowel Surgery: A Randomized Controlled Trial // Saudi Journal of Gastroenterology. 2018 Jan-Feb; 24(1): 52-58.