



Surgical Tactics of Tumorous Obturation Obstruction of The Colon

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ABSTRACT

Purpose of the study is to improve the results and choice of surgical treatment for colon cancer complicated by obstructive colonic obstruction.

Keywords:

Introduction. One of the most common complications of colon disease is obstructive obstruction of cancer origin. According to various authors, over the past 10 years, the number of patients requiring the imposition of an unnatural anus due to obstructive colonic obstruction of tumor origin has increased by 2-8% [4,6,9]. Postoperative mortality in the group of radically operated patients is 20-30%, after palliative operations - up to 40-60%. The choice of surgical tactics for obstructive colonic obstruction of cancer origin still remains controversial [7,9,10]. Some authors propose bowel resection with a primary anastomosis for left-sided localization of the process [5], others recommend multi-stage operations [2,4]. Some authors [1,3,8] perform hemicolectomy with primary ileotransversioanastomosis for right-sided tumor localization and Hartmann's operation for left-sided tumor localization. Most surgeons resort to performing the operation in several stages.

Purpose of the study: To improve the results and choice of surgical treatment for colon cancer complicated by obstructive colonic obstruction.

Material and research methods. Surgical interventions carried out 127 patients with colon cancer complicated by acute intestinal obstruction (AIO) at Andijan branch of Republican Scientific Center for Emergency Medical Care during the period 2018-2023. The age of patients ranged from 28 to 82 years. Patients consisted of women-75 and men-52. The tumor was localized in the cecum in 15 patients, in the ascending colon in 4, in the right hepatic flexure in 9, in the transverse colon in 2, in the left splenic flexure in 12, in the descending colon in 5, in sigmoid colon - in 43 patients, in the rectum - in 37 patients. Noteworthy is the most common complication leading to obstruction of the colon is tumor damage to the sigmoid and rectum (tab.1).

Table.1.
Localization of the tumor in certain areas of the colon

Localization of the tumor	abc	%
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Cecum	15	11,8
Ascending colon	4	3,1
Right hepatic flexure	9	7,1
Transverse colon	2	1,6
Left splenic flexure	12	9,5
Descending colon	5	3,9
Sigmoid colon	43	33,9
Rectum	37	29,1
Total	127	100,0

Results and discussion. The results of surgical treatment of patients with acute insufficiency largely depend on preoperative preparation, which began with the administration of fluids for the purpose of detoxification, correction of water-electrolyte balance and improvement of the rheological properties of blood. If necessary, cardiovascular drugs were prescribed. The volume and duration of preparation for surgery were determined

individually. 69 patients (53.9%) were operated on urgently (on the 1st day), urgently (up to 3 days) - 54 (42.2%) and in the early period (3-5th day) - 4 patients (3.9%). If the localization of the tumor was unclear, the operation was started from the median approach. In cases where the location of the tumor was known, surgical placement was performed through the appropriate pararectal approach (tab.2.)

Table.2.

Distribution of patients according to indication of surgery performed

Indication for surgery	Number of patients	%
Emergency (per 1 day)	69	53,9
Urgently (up to 3 days)	54	42,2
In the early period (3-5th day)	4	3,9
Total	127	100,0

In 78 patients, acute insufficiency was complicated by diffuse peritonitis: serous-hemorrhagic or serous-fibrinous (32), fibrinous-purulent (40) and fecal (6). In addition, in 3 patients a peri-intestinal abscess was found, apparently formed as a result of microperforation of the tumor. Fecal peritonitis developed in 2 patients as a result of rupture of the overstretched cecum and sigmoid colon

and in 4 as a result of perforation of the tumor into the free abdominal cavity. In 84 of 127 patients the tumor was stage 3 and in 44 - stage 4. Histological examination of 90 patients revealed adenocarcinoma in 75, poorly differentiated cancer in 8, solid in 5, mucinous in 1, and carcinoid tumor with metastases in 1 (tab.3.).

Table.3.

Distribution of patients by type of complications of acute insufficiency

Types of complication	Number of patients (n=127)	%
1. Spread peritonitis:	78	61,4
A) serous-hemorrhagic	32	25,2
B) fibrinous-purulent	40	31,5
B) fecal	6	4,7
2. Pericolonic abscess	3	2,4

3. Tumor perforation	4	3,1
4. Rupture of overstretched intestines	2	1,6

During the operation, attention was drawn to the expansion of the colon and ileal loops. With obstruction of the sigmoid and rectum, the diameter of the proximal sections reached 10-15 cm, in 1 patient - even 20 cm. With maximum expansion of the colon, a longitudinal rupture of the serous cover of the cecum was observed in one patient, and in the transverse colon in another. Dilation (up to 8 cm in diameter) and congestion in the loops of the ileum were observed mainly in patients with obstruction of the right half of the colon. If the intestine was significantly dilated, the operation began with its decompression. For this purpose, in 8 patients, the colon was punctured with a trocar with a side outlet and gas and liquid feces were aspirated. After removing the trocar, the pre-applied purse-string suture was tightened, and then an additional Z-shaped suture was applied. For intestinal puncture, an area was selected that would subsequently be resected or used for colostomy. The small intestine in 6 patients was emptied using a multi-perforated nasal probe equipped with a guidewire. In cases of diffuse purulent peritonitis, the probe was left in place for 3-6 days. Intestinal decompression reduces intoxication, allows you to more accurately determine the extent of the cancer process and perform surgery under more favorable conditions.

In choosing tactics for acute neoplastic insufficiency in previous years, we were more often inclined to favor multi-stage operations, but we soon became convinced that such tactics have a number of negative aspects. Sometimes from the first stage of the operation - elimination of obstruction without removing the tumor - to the second - intestinal resection -

for various reasons, a lot of time passes, during which cancer metastases appear, in addition, cancer intoxication persists.

Of the 30 patients with right-sided tumor localization, 25 underwent right hemicolectomy, 2 underwent bypass ileotransverse anastomosis as the first stage of radical treatment, and subsequently underwent radical hemicolectomy. Finally, in 3 patients with stage 4 carcinoma, ileotransverse anastomosis was performed as a palliative intervention.

During right-sided hemicolectomy, in 22 cases we used side-to-side anastomosis, 3-end to end. Despite the small number of observations, it seems that restoration of intestinal continuity by end-to-end anastomosis is more advantageous than side-to-side anastomosis. 97 patients with left-sided localization of colon cancer complicated by acute intestinal intestine were operated on, 39 of them underwent radical Hartmann's surgery or left-sided hemicolectomy (in 15 these interventions turned out to be palliative), in 43, without tumor removal, acute intestinal insufficiency was eliminated by applying a double-barreled anus (39), bypass ileotransverse anastomosis (3) and cecostomy (3). Of these 43 patients, 24 had stage 4 cancer, and in 19, bowel-unloading interventions were the first stage of radical treatment. However, subsequent radical intervention was possible only in 7 patients: extirpation of the rectum in 2, left-sided hemicolectomy with primary anastomosis in 3, Hartmann's operation in 2. Of the 12 other patients, 7 died before repeated surgery, 1 refused repeat surgery, 4 During the reoperation, cancer metastases were discovered.

Table4.
Distribution of patients by type of surgery performed

Types of surgery	Number of patients	%
Right Hemicolectomy	25	19,7
Bypass or transverse anastomosis	5	3,9
Left Hemicolectomy	39	30,7
Hartmann's operation	9	7,1

Overlay of 2-barrel anus	43	33,8
Cecostoma	3	2,4
Rectal extraction	3	2,4
Total	127	100,0

With this individualized approach to the treatment of patients with colon cancer complicated by acute intestine, the following immediate results were obtained. Of the 63 patients who underwent radical surgery in the presence of acute intestinal obstruction, 6 (9.5%) died. All 9 patients who underwent palliative surgery died in the early postoperative period: 27 (48.2%), including 7 who were diagnosed with stage 3 cancer, and 20 - 4.

The causes of death were progressive peritonitis (22), leakage of anastomotic sutures (2), necrosis of the pancreas (1), thromboembolic complications (3), pneumonia (2), cancer cachexia (2) and necrosis of the intestine exposed to the anterior abdominal wall in the form of a colostomy (1).

Conclusion. Thus, surgical tactics in patients with obstructive intestinal obstruction due to colon cancer are determined individually. When choosing a surgical intervention, the general condition of the patient, the location and extent of the cancer process should be taken into account. The purpose of the operation is to eliminate acute intestinal obstruction and, if possible, rid the patient of a cancerous tumor.

References

1. Алиев Ф. Ш. и др. Хирургическое лечение при опухолевой толстокишечной непроходимости: проблемы и перспективы (обзор литературы) // Медицинская наука и образование Урала. – 2021. – Т. 4. – С. 160-15.
2. Гордеева Е. В., Щаева С. Н. Сравнение методов хирургического лечения острой левосторонней толстокишечной непроходимости опухолевого генеза // Смоленский медицинский альманах. – 2021. – №. 4. – С. 145-150.
3. Закаев К. Ю. и др. Анализ заболеваемости и летальности у пациентов с острой толстокишечной непроходимостью опухолевого генеза (по материалам клиники) // Астраханский медицинский журнал. – 2022. – Т. 17. – №. 2. – С. 44-53.
4. Зурнаджянц В. А. и др. Хирургическая тактика при обтурационной толстокишечной непроходимости опухолевого генеза в условиях общехирургического стационара // Астраханский медицинский журнал. – 2021. – Т. 16. – №. 1. – С. 15-31.
5. Огизбаева А. В., Нурбеков А. А., Тургунов Е. М. Колоректальный рак, осложненный острой кишечной непроходимостью // Астана медициналық журналы. – 2020. – Т. 104. – №. 2. – С. 109-117.
6. Пушкирев Б. С. Острая обтурационная кишечная непроходимость: отдельные вопросы диагностики и лечения : дис. – Федеральное государственное бюджетное образовательное учреждение высшего образования «Пермский государственный медицинский университет имени академика ЕА Вагнера» Министерства здравоохранения Российской Федерации, 2023.
7. Тотиков З. В. и др. Оптимизация диагностического алгоритма при острой обтурационной толстокишечной непроходимости опухолевого генеза // Колопроктология. – 2020. – Т. 19. – №. 3. – С. 72-79.
8. Юнусов С. и др. Выбор тактики в ургентной абдоминальной хирургии больных с колоректальным раком, осложненный острой кишечной

- непроходимостью //Общество и инновации. – 2022. – Т. 3. – №. 8/S. – С. 21-27.
9. Shariff F. et al. Malignant bowel obstruction management over time: are we doing anything new? A current narrative review //Annals of Surgical Oncology. – 2022. – С. 1-11.
10. Yoo R. N., Cho H. M., Kye B. H. Management of obstructive colon cancer: Current status, obstacles, and future directions //World Journal of Gastrointestinal Oncology. – 2021. – Т. 13. – №. 12. – С. 1850.