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DIAGNOSIS AND TREATMENT OF OBSTRUCTIVE COLONIC OBSTRUCTION OF TUMOR ETIOLOGY

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Abstract:

Obstructive tumor colonic obstruction (OTCO) is one of the most severe and frequent complications of colorectal cancer and occupies a leading place in the structure of emergency abdominal surgery. Currently, one of the important and unsolved problems in oncology is colon cancer, and in surgery - intestinal obstruction from 29-40%, which ranks first in the structure of complicated forms of colorectal cancer and is the most pressing problem in emergency surgery. [Abdullaev M A. 2005. Agavelyan A.M., Enfenjyan A.K. 2005. Costi R, Leonardi F, Zanoni D, Violi V, Roncoroni L 2014. Setti Carraro PG, Segala M, Cesana B, Tiberio G.2001. Tekkis PP, Kinsman R, Thompson MR, Stamatakis JD. [2004]. The incidence of this complication ranges from 15 to 88.9% [Ektov VN 2017 Ferlay J, Shin HR, Bray F, Forman D, Mathers C, Parkin DM. 2010]. The complexity of treatment is due to late diagnosis, a high rate of diagnostic errors, and the lack of a unified surgical approach. The paper presents an analysis of 193 case histories of patients with intestinal obstruction who underwent treatment in a surgical clinic in 2000–2018. It was found that in 83.9% of cases, the cause of obstruction was a colon tumor. Clinical manifestations, diagnostic approaches, and surgical tactics were analyzed depending on the tumor location. The mortality rate was 16%, primarily in patients over 65 years of age. Differentiated surgical tactics for right-sided and left-sided tumor localization are substantiated.

Key words: colorectal cancer, intestinal obstruction, obstructive obstruction, hemicolectomy, Hartmann's operation, diagnostics, surgical tactics.

Introduction.

Colon cancer remains a pressing issue in modern oncology. One of its most severe complications is obstructive intestinal obstruction, which occurs in 29-40% of complicated cases of colorectal cancer. This condition requires emergency surgical intervention and is characterized by a high mortality rate.

Difficulties in timely diagnosis, late hospitalization of patients, a high rate of diagnostic errors (33-50%), and the lack of a unified surgical approach significantly complicate the treatment of this patient population.

Study Objective:

To evaluate the clinical and diagnostic characteristics and justify the choice of surgical approach in patients with obstructive tumor-induced colonic obstruction depending on tumor location.

Study Materials and Methods:

A total of 193 medical records of patients with intestinal obstruction treated in a surgical clinic between 2000 and 2018 were analyzed.

Patient ages ranged from 19 to 88 years, with a mean age of 67.5 years. There were 76 men (39.3%) and 117 women (60.7%).

In 162 patients (83.9%), the cause of intestinal obstruction was a colon tumor. The remaining cases included sigmoid volvulus (9.3%), adhesive disease (4.7%), and Crohn's disease (2.1%).

Methods:

The diagnostic workup included laboratory tests, plain abdominal X-rays,

emergency barium enema, colon ultrasound,

multislice computed tomography (MSCT), and endoscopic examinations. Preoperative homeostasis correction was performed: infusion therapy, nasogastric decompression, siphon enemas, and, in some cases, transanal decompression using a silicone tube.

Study results:

Of the 162 patients with tumor-related obstruction:

31 had tumors located in the right colon,

131 had tumors located in the left colon. For right-sided obstruction, the following procedures were performed:

Hemicolectomy with end-to-side or end-to-end ileotransverse anastomosis was performed in 26 patients, and hemicolectomy with ileostomy was performed in 5 patients (due to peritonitis and tumor perforation). For left-sided tumors, the following procedures were performed:

Hartmann's procedure in 56 patients,

sigmoid colon resection in 11 patients,

left-sided hemicolectomy with primary anastomosis in 49 patients, and extended operations with lymphadenectomy in 15 patients.

Postoperative mortality was 16% (26 patients). The main causes of death were mesenteric thromboembolism, peritonitis, myocardial infarction, and anastomotic leak.

Discussion:

The clinical course of acute myocardial infarction significantly depends on the tumor location. With right-sided obstruction, patients' condition is more severe due to severe fluid and electrolyte imbalances and rapid dehydration. Left-sided obstruction more often allows for staged or reconstructive surgery.

The use of emergency fluoroscopy and colon ultrasound allows for the precise determination of the level of obstruction, the degree of lumen narrowing, and the selection of the optimal surgical approach. The results confirm the need for a differentiated approach to surgical intervention. Disturbed homeostasis was corrected (saline solution and glucose-potassium mixture were infused), and protein supplements were administered when necessary. Concurrent measures to resolve intestinal obstruction included nasogastric intubation with gastric lavage and

a siphon enema. In 12 patients, a silicone tube was inserted through the colon using a rectoscope, resulting in the removal of a large amount of gas and liquid intestinal contents. The patients' conditions improved somewhat, and they underwent delayed surgery. If these measures were ineffective or if peritonitis developed within 3-24 hours, the patients underwent surgical treatment.

The choice and extent of the operation depended on the location, extent of the tumor spread, presence of metastases and the patient's condition.

In 26 patients with right-sided intestinal obstruction, hemicolectomy with end-to-side or end-to-end ileotransverse anastomosis (6) was performed. In 5 patients, due to peritonitis secondary to tumor decay and perforation, hemicolectomy with ileostomy was performed after thorough abdominal debridement.

Of the 131 patients with left-sided colon tumors complicated by intestinal obstruction, 56 underwent a Hartmann procedure, 11 underwent sigmoid resection, and 49 patients underwent left-sided hemicolectomy with restoration of colonic continuity, i.e., primary endosigmoid anastomosis or endorectal anastomosis.

Fifteen patients had tumor invasion of the retroperitoneal tissue, ureter, and lateral abdominal wall, with multiple para-aortic metastases. These patients also underwent radical surgery, including an extended hemicolectomy with extensive retroperitoneal lymphadenectomy. In three patients, the left ureter was involved in the perifocal process, which was resected and subsequently reconstructed end-to-end with a catheter. Two weeks later, the catheter was removed using a cystoscope. The afferent portion of the colon was then brought out as a single-barrel colostomy, and the distal portion was closed.

All surgeries involved nasoenteric and transanal decompression. Postoperatively, antibiotic treatment was administered, including transfusions of blood rheology and microcirculation enhancers, protein supplements, and a glucose-potassium mixture.

Twenty-six patients died postoperatively, representing a 16% mortality rate. Mortality was primarily observed in patients over 65 years of age. The causes of death were anastomotic leakage (2), stoma prolapse (3), mesenteric thromboembolism (7), ongoing peritonitis (7), and myocardial infarction (7).

Conclusion

1. In 83.9% of cases, colonic obstruction is caused by a colon tumor.

2. Emergency fluoroscopy and ultrasound sonography are effective diagnostic methods and help determine the timing and extent of surgical intervention. 3. For right-sided tumors, a hemicolectomy with ileotransverse anastomosis is indicated; in severe cases, a hemicolectomy with ileostomy is indicated.

4. For left-sided tumors, a Hartmann procedure or left hemicolectomy with primary anastomosis is appropriate.

REFERENCES

1. Эктов В. Н. Применения межкишечного анастомоза в хирургическом лечении обтурационной толстокишечной непроходимости опухолевой этиологии. Хирургия 2017 №9.

2. Агавелян А.М., Энфенджян А.К. Обтурационная кишечная непроходимость при колоректальном раке // Между нар. хир. Конгресс Акт. проб л. совр. хир. -М., 2003.-С.121.
3. Абдуллаев М. А. Выбор хирургической тактики при острых осложнениях рака ободочной кишки: Дис. . д-ра. мед. наук : СПб., 2005 . 267 с.
4. Ferlay J, Shin HR, Bray F, Forman D, Mathers C, Parkin DM. Estimates of worldwide burden of cancer in 2008: GLOBOCAN 2008. Int J Cancer. 2010;127:2893-2917. https://doi.org/10.1002/iic.25516.
5. Costi R, Leonardi F, Zanoni D, Violi V, Roncoroni L. Palliative care and end-stage colorectal cancer management:
The surgeon meets the oncologist. World J Gastroenterol. 2014;20(24):7602-7621.https://d oi.o rg/10.3748/yyjg, y 2 0. i2 4.7602
6. Setti Carraro PG, Segala M, Cesana B, Tiberio G. Obstructing colonic cancer: failure and survival patterns over a ten-year follow-up after one-stage curative surgery. Dis Colon Rectum. 2001;44:24350. https://doi.org/10.1007/bf0223430Q.