



Original Contribution

OUR EXPERIENCE IN SURGICAL TREATMENT OF THE COMPLICATED FORMS OF COLORECTAL CANCER

V. Vassilev^{1*}, D. Tanev², T. Kavrykov³, H. Abrashev³

¹MBAL – Burgas AD, Burgas, Bulgaria

²MBAL “Hristo Stambolski” Ltd, Kazanlak, Bulgaria

³UMBAL “Prof. Dr. Stoqn Kirkovich” AD, Stara Zagora, Bulgaria

ABSTRACT

There is a constant increase in the incidence of colorectal cancer and its complicated forms that reach up to 40 % of all patients. The period from 2010 to 2014, 86 patients have been examined, 51 males and 35 females all operated in the Surgical Department of MBAL “Hr.Stamboliyski M.D.”- Kazanlak with different forms of complicated colorectal cancer. The operative conduct was considered with the localization of tumor process, the stage of advance of the process (operability), type of complication, general condition, age of the patients and the presence of concomitant diseases. Postoperatively a significant number of complications were observed due to the inadequate preoperative preparation for emergency surgery, advanced age of the patients and multiple concomitant diseases. In 25 patients /29, 06%, a stoma had to be created, which was induced by a sudden worsening of quality of life.

Key words: colorectal cancer, stoma, elderly patients, quality of life

INTRODUCTION

In the last decades there has been a steady increase in the prevalence of colorectal cancer (CRC). (1) – every year over a million people new patients are diagnosed, representing 9% of all cancer diseases. The morbidity increases constantly around 3% per year in the industrial countries. Colorectal cancer is the second most common cancer in men (after lung cancer) and the third in women (after breast cancer). Around 85% of patients with colon cancer are over the age of 50. (2, 3). The incidence is constantly increasing and becoming more and more often in young patients. (4) Rectal cancer occurs more often in men, while the prevalence of the colon cancer is almost equal in men and women. The incidence of the proximal localization of the colon cancer is increasing, while those of the rectum are reducing. Moreover, still 50% of all colorectal cancer localization is found in the rectum or in the border between the rectum and the sigma. (5, 6) According to V.P.Sajin and Co /2010/, about 40% of the patients with CRC, are admitted to the hospital with its complicated forms, mainly mechanical ileus /45-60%/ and this is connected with high lethality rates /43,5%/.

The high incidence of the complicated forms (mechanical ileus, acute peritonitis due to perforation of the cancer, massive bleeding from the tumor and high lethality due to later sought specialized medical care) have been also reported by other authors. (7, 8) Scientific data shows that 60% of the lethal cases in colon cancer can be prevented by early diagnosis of the disease, before the appearance of complications and distant metastases. (2, 6)

PURPOSE

An analysis and evaluation of operated patients with complicated forms of colorectal cancer and search for practical approaches for successful treatment.

MATERIALS AND METHODS

Subject of our investigation are 86 patients, 51 males and 35 females, operated in the Surgical Department of MBAL “Hr.Stamboliyski M.D.”- Kazanlak /2010-2014/ with different complicated forms of colorectal cancer. **Table 1** shows the distribution of patients by gender and age.

The table shows that advanced age steeply increases the incidence of complicated forms of colorectal cancer. We registered 3 patients under the age of 50 and even one patient under the age of 40 which reveals the trend of "rejuvenation" of the disease. **Table 2** shows

*Correspondence to: V. Vassilev, MBAL – Burgas AD, Burgas; Email: vailvasilev@mail.bg, GSM: 0887700957

the contribution of the patients according to the location of the malignant process.

Table 1. Distribution of patients by gender and age

age gender	under 40 г.	40 – 50 г.	50 – 60 г.	60 – 70 г.	over 70 г.
men	1	1	5	14	30
women	-	2	3	9	21

Table 2. Contribution of the patients according to the location of the malignant process

localization gender	colon ascendens and flexura hepatica	Colon transversum	Colon descendens and flexura lienalis	sigma	rectum
men	4	1	16	19	11
women	4	2	8	12	9
%	9,30	3,49	27,91	36,05	23,25

The most common localization of the tumor in elderly patients is observed in colon descendens, sigma and rectum. We have a single patient the age of 40 years with tumor localization on rectal level, 7cm from LAR,

which means that every rule in medicine has its exceptions.

RESULTS AND DISCUSSION

Table 3 shows the different complications of CRC, operated in our department.

Table 3. Types of complications of CRC

Type of complication of CRC	Mechanical ileus	Bleeding from gastro-intestinal tract	Perforation of the tumor	Local inflammatory infiltrate
number	49	11	18	8
%	56,98	12,79	20,93	9,30

More than half of the patients had mechanical ileus in various progress, which determined the timing of surgery in these patients. 20,93% of the patients were diagnosed with acute peritonitis due to a perforation of the tumor – a condition that requires an emergency surgery. Amongst the elderly patients co-morbidities were observed more often– arterial hypertension, ischemic heart disease, chronic obstructive pulmonary disease (COPD), chronic renal insufficiency, diabetes, etc., which increased the operational and anesthetic risk. Overall in 37 patients (43.02%), emergency surgery was required.

The operative strategy was considered with the localization of the tumor process, the progress of process (operability, curability), the types of

complicated forms, the status and age of the patient, the presence of co-morbidities. When the localization is on the right side and it is estimated that the operation can be performed after a right-side hemi-colectomy and evacuation of the toxic small-intestines contents, the intestinal passage is restored with a later-lateral anastomosis usually without an intraoperative colonic lavage stoma. The hematoma in the gastrointestinal tract in these cases is more often than ileus. In the left side localizations ileus or peritonitis is more often observed due to perforation of the tumor. In these cases after evaluation of the operability and curability a left side hemi-colectomy can be done, with a resection of the sigma or rectum according to the oncological procedure guidelines - closing the distal segment of the

colon with extraperitonisation and colostomy (Hartman operation). After 3 months period of recovery, the intestinal passage is restored not until preoperatively all diagnostics (CT, Ultra Sound, tumor markers etc.) exclude relapse or metastasis of the process. [7] In cases when an operation of the tumor cannot be performed a definitive colostomy is made. When the localization of the tumor is in the rectum at level not lower than 5 cm from the anorectal line and there is not advanced ileus, after thorough cleaning of the Gastrointestinal tract, a frontal resection of the rectum with intraluminal protection of the anastomosis is made. If considered an ileostomy can be performed to reduce the burden of not evacuating the faeces depending on the severity of the ileus. Below the 5cm level from the anorectal linea a Miles operation must be performed, which we have done in two of our patients. We created a stoma in 25 of our patients due to the mentioned above situations. These patients had sudden worsening of their quality of life postoperatively for several reasons: everyday change of the colostomy bags, infection of the skin, the presence of constant smell despite of the good hygiene, a discomfort from the colostomy bag and etc.

An important element in operative treatment of complicated forms of CRC is the risk of developing postoperative complications. The main case for them is the insufficient preoperative preparation because of the need of emergency operation, elderly, a lot of co-morbidities and etc. We found the following early postoperative complications: postoperative bleeding from the abdomen in 3 patients(3,49%), insufficient of the anastomosis in 4 patients(4,65%), early postoperative ileus in 4 patients(4,65%), suppurations of the wound in 17 patients(19,77%), insufficiency of the rectal stump in 3 patients(3,49%), complications because of other organs and body systems (heart failure, bronchopneumonia, DVT, decompensate diabetes) in 24 patients(27,91%). In 9 of the patients a second laparotomy had to be made (10,46%). Eleven patients had died (12,79%). In two patients we observed late postoperative complication - stenosis of the anastomosis when an automatic stapler had been used.

CONCLUSION

The operative treatment of the complicated forms of the CRC is one of the current and intractable problems of the abdominal surgery. The complexity of the problem derives from the need to comply with a number of factors and parameters in each case for its successful resolution. The experience of the surgeon is very important because most of the operations are with big and very big capacity and complexity. The lot of co-morbidities, the large number of patients with advanced carcinoma, elderly people and a lot of postoperative complications determine the tight flow of the postoperative period, the higher cost of materials and medicine and the high lethality. In patient with a stoma on their front abdominal wall sharp deterioration of the quality of life is observed, that's why additional efforts are required from the patient, the medicine personal and the relatives of the patient. It is recommended a recovery of the intestinal passage to be done whenever possible, without delay, within the established deadlines.

REFERENCES

1. Vorbuev G.I., Foundations in coloproctology, *Medicine*, 143-146, 2006
2. Kostov D., Kobakov G., Liver metastasis in colorectal cancer, *MU-Varna*, 54-57, 2006
3. Manetti C., Alres A., Benoist S. and oth., Therapy for colon carcinoma, *Ann de chirurgie*, 24, 130-168, 2005
4. Hegele, A., V. Mecklenburg, Z. Varga, P. Olbert, R. Hofmann, P. Barth. CA19.9 and CEA in transitional cell carcinoma of the bladder: serological and immunohistochemical findings.- *Anticancer Res.*, 30, No 12, 5195-5200, 2010
5. Marra F., Steffen T., Kalak N., Anastomotic leakage as a risk factor for the long-term outcome after curative resection of colon cancer, *Enr. J. Surg. Oncol.*, 35,10, 1060-1064, 2009
6. Sultanov G.A., Knaish V.I., Aliev S.A., Colorectal cancer, *Intra-abdominal surgery name of Grekova*, ; 2, 40-43, 1997
7. American Join Cancer Committee 7th edition. *Springer*, 143-159, 2010
8. Iuhtin B.I., Surgery of the colon, *Medicine*, 15-19, 1996