

V. G. Dubinina, D. M. Osadchyy, V. E. Maksymovskyy

OUR EXPERIENCE OF COLORECTAL CANCER LAPAROSCOPIC TREATMENT

The Odessa National Medical University, Odessa, Ukraine

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В. Г. Дубинина, Д. М. Осадчий, В. Е. Максимовский

НАШ ОПЫТ ЛАПАРОСКОПИЧЕСКОГО ЛЕЧЕНИЯ КОЛОРЕКТАЛЬНОГО РАКА

Одесский национальный медицинский университет, Одесса, Украина

В статье приведен опыт использования лапароскопических методов хирургического лечения колоректального рака у 30 пациентов. Проанализировано состояние онкологических больных по стадиям заболевания, локализации опухолей и методикам оперативных вмешательств. Доказано, что при колоректальном раке лапароскопические операции являются альтернативой традиционным хирургическим вмешательствам и могут быть выполнены в адекватном объеме.

Ключевые слова: онкология, колоректальный рак, лапароскопические технологии.

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Introduction. Laparoscopic technology for colorectal cancer allows the surgeon to use new, more sophisticated methods of operation. At the same time one often have to prove the need for laparoscopic technologies or their combination with conventional surgical techniques in a single transaction.

Objective. To share our experience with laparoscopic techniques for surgical treatment of CRC.

Materials and methods. Since 2011 30 patients with tumors of colon and rectum have been operated by laparoscopic technology. Among them women — 11, men — 19. Age of cancer patients ranged from 32 to 68 and averaged (59.0±8.7) years ($p<0.05$), dominated in elderly people: 14 patients were over 60 years.

Results. We have used these techniques of laparoscopic surgery: radical: right side hemocolotomy — 7 patients (23.3%) by high performance right-perianal incision, followed by withdrawal of the drug mobilized and further resection of the right half of colon tumor formation and ileotransversoanastomosis bifariamous hand stitch indulgent vicryl threads.

Discussion. For adequate laparoscopic operation on the large colon and rectum cancer (provided technical operability) one must consider compliance with these basic principles. Regardless of stage of disease and the nature of tumor growth it was carried out: a full selection of great vessels with displacement of tissue from lymph nodes in the direction of the drug, tissue above the lymph collectors isolated individual sections for separation of lymphatic vessels and interrupt tract metastasis; necessarily performed lymphadenectomy (aorto-femoral).

Conclusions. Favorable results of laparoscopic operations for colorectal cancer are associated with low traumatic interventions. Laparoscopic colorectal cancer surgery is an alternative to traditional operations and can be made in adequate volume. Laparoscopic intervention in colorectal cancer patients reduce length of stay in hospital and in the manual mode of formation of anastomosis — are more economically feasible.

Key words: oncology, colorectal cancer, laparoscopic technologies.

Introduction

Colon cancer and rectal tumor are real scourges of modern industrialized countries. Among older people in some cases it falls to the second place of cancer patients.

The concept of colorectal cancer (CRC) in modern medicine brings together different in form and structure, and localization of malignant epithelial tumors of the intestine and, in fact, the anal canal. It is equally related tumors of the colon ("colon") and tumors of the rectum ("rectum"), and the

most malignant in their course are adenocarcinoma of the colon and sigmoid colon adenocarcinoma.

Ukraine has registered an average prevalence of CRC, which is 36.5 new cases per 100 thousand population annually. CRC is the second by prevalence malignant tumor in men (after bronchopulmonary cancer) and the third in women (after bronchopulmonary cancer and tumors of the breast). Every year in Ukraine 15–17 thousand new cases of CRC and about 8 thousand people die.

CRC is revealed frequently in the later stages — frequency of detection of 3–4th stage is 70% of all cases [1].

Surgical treatment of diseases of the colon is one of the most difficult problems of Coloproctology. Improvement of methods of surgical treatment of colon cancer associated with a wide laparotomy does not reduce the frequency of postoperative complications, which sometimes reaches 20% [2–4]. The risk of wound and intra-postoperative complications with equal probability limits of radical surgery



in frail and elderly patients, which significantly affects the immediate results of treatment, often leading to disability. Therefore, the use of laparoscopic surgery for CRC can significantly reduce the incidence of postoperative complications, and injury and improve operating results of treatment. Rapid introduction of revolutionary technologies in laparoscopic surgery over the past decade has greatly enhance the classical surgery in the treatment of colorectal cancer. Now it is not questioned advisability of different kinds of sphincter-preserving surgery. Laparoscopic technology for colorectal cancer allows the surgeon to use new, more sophisticated methods of operation. At the same time we often have to prove the need for laparoscopic technologies or their combination with conventional surgical techniques in a single transaction [5–8].

Objective. To share our experience with laparoscopic techniques for surgical treatment of CRC.

Materials and Methods

Since 2011, 30 patients with colon and rectum tumors were operated with laparoscopic technology: women — 11, men — 19. Cancer patients age ranged from 32 to 68 and averaged (59.0±8.7) years ($p < 0.05$), dominated in aged and elderly patients: 14 patients over 60 years. Among operated patients are men — 63.3%.

Tumor localized in the blind and ascending colon — in 7 (23.3%) cases, in the sigmoid — 11 (36.6%) and in the rectum — 12 (40%) cases.

Distribution of patients according to stage of disease was responsible pathohistological classification of TNM, developed by the International Committee Anticancer Association in 1997 (Table 1).

The predominance of patients with II stage of CRC is associated with targeted screening the patients to prevent complications

in stages of initial set of operational experience.

Patients with IV stage of disease were performed to palliative operation in order to eliminate effects of intestinal obstruction.

Preoperative evaluation of patients was carried out by standard methods using endoscopic study of gastric and colon irrigoscopy, ultrasound or CT studies of the abdomen, X-ray examination of the chest, and generally accepted clinical and laboratory blood and urine.

Results

We have used the following techniques of laparoscopic surgery. Radical: right side hemicolectomy — 7 (23.3%) patients by high performance right-perianal incision, followed by withdrawal of the drug mobilized and further resection of the right half of colon tumor formation and ileotransversoanastomosis bifariamous hand stitch indulgent vicryl threads.

There have been performed 7 (23.3%) sigmoid colon resections by execution of left-oblique incision in the left iliac region and 7 (23.3%) laparoscopic anterior resection of the rectum. It was used a circular suturing device Ethicon Endosurgery CDH-29.

The transition from laparoscopic to open surgery option (conversion) was performed in 2 (6.6%) cases, the reasons were large tumor size, tumor went out the limits of the colon wall. The operation was completed by traditional laparotomic access.

7 patients with IV stage of CRC with metastatic lesions of the liver or peritoneal carcinomatosis with symptoms of chronic intestinal obstruction were operated. All patients were with tumors localized in the left half, or rectum. This contingent was performed colostomy formation of additional metastases biopsy liver (3–10%) and peritoneum (2–6.6%).

Due to a relatively short period of observation, we did not have laparoscopic surgery for

cancer of the transverse colon and descending colon.

Discussion

For adequate laparoscopic operation on the large colon and rectum cancer (provided technical operability) must consider compliance with these basic principles. Regardless of stage of disease and the nature of tumor growth it was carried out: a full selection of great vessels with displacement of tissue from lymph nodes in the direction of the specimen, tissue above the lymph collectors isolated individual sections for separation of lymphatic vessels and interrupt metastasis way; necessarily performed lymphadenectomy (aorto-femoral).

Duration of surgery was (187.0±5.2) min, intraoperative blood loss — (150±10) ml.

Restoration of peristalsis after laparoscopic surgery occurred in 2.1 days, independent stool appeared to 3–4-day of the postoperative period. At the same time need in analgesics significantly decreased, some patients began to walk in a day after surgery.

Observations have shown that laparoscopic surgery half reduces the stay of patients in hospital, the average duration of treatment was (6.1±1.3) days.

Complications and deaths after laparoscopic surgery are not observed.

Conclusions

1. Favorable results of laparoscopic operations for colorectal cancer are associated with low traumatic interventions.

Table 1

Distribution of Patients According to Disease Stage, abs.

Stage	Men	Women
1. T ₁₋₂ , N ₀ M ₀	8	5
2. T ₃₋₄ , N ₀ M ₀	4	3
3. T ₁₋₄ , N ₁ M ₀	2	1
4. T ₁₋₄ , N _x M ₁	5	2
Total	19	11



2. Laparoscopy in colorectal cancer surgery is an alternative to traditional operations and can be made in adequate volume.

3. Laparoscopic intervention in colorectal cancer patients reduce length of stay in hospital and in the manual mode of anastomosis formation are more expedient economically.

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A. V. Boychuk, Yu. B. Boychuk, O. M. Ischak

COMPARATIVE CHARACTERISTICS OF THE EFFECTIVENESS OF VARIOUS METHODS OF SURGICAL AND CONSERVATIVE TREATMENT OF ECTOPIC PREGNANCY

The Ternopil State Medical University named after Horbachevskyy, Ternopil, Ukraine, The Ternopil City Clinical Hospital N 2, Ternopil, Ukraine

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А. В. Бойчук, Ю. Б. Бойчук, О. М. Ишак

СРАВНИТЕЛЬНАЯ ХАРАКТЕРИСТИКА ЭФФЕКТИВНОСТИ РАЗЛИЧНЫХ МЕТОДОВ ОПЕРАТИВНОГО И КОНСЕРВАТИВНОГО ЛЕЧЕНИЯ ВНЕМАТОЧНОЙ БЕРЕМЕННОСТИ

Тернопольский государственный медицинский университет им. И. Я. Горбачевского, Тернополь, Украина,

Тернопольская городская клиническая больница № 2, Тернополь, Украина

Изучены 166 историй болезней пациентов с внематочной беременностью. Исследована эффективность различных методов оперативного и консервативного лечения внематочной беременности. Полученные результаты убедительно свидетельствуют о преимуществе применения по показаниям лапароскопического доступа при лечении нарушенной трубной беременности, что позволяет рекомендовать его как метод выбора. Метод консервативного лечения прогрессирующей трубной беременности с использованием метотрексата позволяет сохранить анатомическую и функциональную целостность маточной трубы в 72,5 % случаев.

Ключевые слова: внематочная беременность, метотрексат, консервативное и оперативное лечение.

