



# COMPARISON OF THE CHOICE OF SURGICAL TREATMENT OF RECTAL CANCER AND CLINICAL TREATMENT

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## ABSTRACT

**Objective:** Comparison of laparoscopic surgery and laparoscopic surgery in colorectal cancer surgery: the clinical data of 64 patients with rectal cancer who underwent anorectal surgery from January 2015 to January 2017 were retrospectively analysis. Our hospital according to the random number table method to these 64 patients were divided into control group and observation group, each group had 32 patients. Our patients were divided into two groups according to the traditional laparotomy group and the laparoscopic surgery group. **Results:** There were significant differences in the contrast indexes between open surgery group and laparoscopic surgery group, which was statistically significant. **Conclusion:** The clinical treatment effect of laparoscopic surgery group is remarkable, and this method is worthy of clinical application.

## 1. INTRODUCTION

Rectal cancer is a common gastrointestinal malignancy caused by the change of gene of rectal tissue cells. The cause of this is not yet fully understood. It is closely related to eating habits, social environment and genetic factors. In recent years, with the improvement of people's living standards, people's animal fat and protein intake increased, inadequate intake of dietary fiber, leading to the incidence of rectal cancer increased year by year. The incidence of colorectal cancer and social environment, lifestyle (especially eating habits, lack of physical activity), genetic factors [1].

It is believed that the carcinogenic process is the main effect of dietary factors, combined with other factors of the multi-link the same effect. (1) Diet and carcinogens: epidemiological studies have shown that the occurrence of colorectal cancer and economic status, diet is significantly linked. It is generally believed that high animal protein, high fat and low fiber diet is a high incidence of colorectal cancer factors. Eating more fat, more bile secretion, bile acid decomposition products are also more intestinal anaerobic enzyme activity is also increased, resulting in intestinal carcinogen, promote cancer formation increased, easy to cause colorectal cancer [2]. There are also studies that some of the ingredients in the beer itself is a weak rectal cancer starting or promoting factors, so the occurrence of beer and colorectal cancer.

In addition, inadequate intake of vitamins, oil fried food too much food and other factors may also be related to the occurrence of rectal cancer. (2) Rectal non-cancerous diseases: almost all of the rectal cancer are from the beginning of the development of polyps. Polyps originate in the rectum of the inner or intestinal wall, these diseases after years of delay and evolved into cancer. Some types of polyps (inflammatory polyps) are not precancerous lesions, but adenomatous polyps can increase the risk of cancer, especially multiple or large polyps. It is generally believed that adenomas with high risk are large (> 1 cm) tubular adenomas, multiple adenomas, adenomas with villi, and adenomas with poorly differentiated tumors. Chronic ulcerative colitis is closely related to colon cancer, but not closely related to the occurrence of rectal cancer. (3) Other diseases: some patients with chronic schistosomiasis associated with colorectal cancer, but the two were not

found a significant correlation. (4) Genetic factors: epidemiological studies have confirmed that people with a history of colorectal cancer than the general population of high risk of rectal cancer, a family of people suffering from rectal cancer risk of suffering from the disease 2 times higher than the general population, And the age of illness is clearly ahead of time.

## 2. TREATMENT APPROACH

### 2.1 Surgical treatment

Surgical treatment has traditional laparotomy and minimally invasive laparoscopic surgery. Laparoscopic surgery the traditional method is in the patient's waist for three small 1 cm small incision, each inserted a called "trocar" pipe-like work channel, after all the operations are carried out through the three pipes; and then a special lengthened surgical instrument in TV monitoring to complete the same steps as open surgery, to achieve the same surgical results [3]. Laparoscopy is a device with a miniature camera. Laparoscopic surgery is the use of laparoscopic and related equipment for the operation: the use of cold light to provide lighting, the laparoscopic lens (diameter 3-10mm) into the abdominal cavity, the use of digital camera technology to laparoscopic images taken through the light guide Fiber conduction to the post-level signal processing system, and real-time display in the dedicated monitor.

Then the doctor through the monitor screen shows the patient organs at different angles of the image, the patient's condition analysis and judgment, and the use of special laparoscopic instruments for surgery. Laparoscopic surgery using 2-4-hole operation method, one of which opened in the human body's navel eyes, to avoid the patient's abdominal parts to leave long strip of scar, after recovery, only in the abdominal cavity to leave 1-3 0.5- 1 cm linear scar, it can be said that the wound is small, pain, small surgery, so it was called "keyhole" surgery. The development of laparoscopic surgery reduces the pain of the patient's surgery, while reducing the recovery period of the patient, and relatively reduce the cost of the patient's expenditure, is a rapid development in recent years, a surgical project [4]. The advantages of laparoscopic surgery after two holes is very obvious, the first is a small trauma, only 2 small mouth, scar is very small, which is young and beautiful women is

more noteworthy. Second, the surgery for the single-pole straight into the infiltration of the surrounding tissue to a minimum, the chance of postoperative adhesions become smaller. Third, the patient's postoperative wound pain was significantly reduced. Fourth, the number of hospital days less, and some as long as 2-3 days to discharge, 7 days to fully healthy and put into work, so that the burden on patients greatly reduced, while the hospital bed turnover rate.

**2.2 Chinese medicine treatment**

Traditional Chinese medicine treatment of cancer can reduce the symptoms and pain of patients, improve the quality of life, prolong life, reduce cancer mortality [5].

(1). Damp heat accumulation type; Pulsatilla soup addition and subtraction. Pulsatilla 30g, Qinpi 15g, Coptis 3g, Phellodendron 9g, Red Teng 15g, Patrinia 15g, Sophora flavescens 15g, Portulaca 15g, White Hibiscus 12g, rattan root 30g.

(2). Blood stasis internal resistance type: Geshen Zhuyu Decoction. Peach kernel 9g, red peony 9g, angelica 9g, Chuanxiong 6g, Wulingzhi 9g, Cyperus rotundus 9g, Yuan Hu 15g, Curcuma 15g, A bead 9g, soil Fuling 30g.

(3). Spleen qi stagnation type: incense six Junzi Decoction. Wood 6g, Amomum villosum 3g, Codonopsis 15g, Atractylodes 12g, Poria 12g, dried tangerine peel 6g, August Zha 12g, Citrus aurantium 9g, black medicine 9g, green calyx plum 9g, Shen Hongqu 9g.

(4). Spleen and kidney yang type: Li Zhong Decoction. Codonopsis 15g, fried Atractylodes 12g, gun ginger charcoal 3g, nutmeg 9g, psoralen 12g, Schisandra 6g, Evodia 3g, aconite 6g, cinnamon 3g.

**3. INFORMATION AND METHODS**

**3.1 Research material**

A total of 64 patients underwent arthritis treatment in our hospital from January 2015 to January 2017 were observed in 64 patients, including 32 in the experimental group and 32 in the control group. The average age of 60. 875 ± 10 years); 42 males and 22 females; which two groups of patients in gender, age, no significant difference (P> 0.05), see Table 1.

**Table 1:** Comparison of two cases of general data

Group	Number of cases	Gender		Average age
		Male	Female	
Test group	32	22	10	62.12
Control group	32	20	12	59.63

Table 1 shows that the two groups of patient's sex, age, the statistical test was no significant difference, comparable.

**3.2 Research methods**

All patients underwent surgery by the same surgical group of surgeons. Both open surgery, and laparoscopic surgery. Preoperative preparation and bowel preparation were performed with routine open surgery, partial benign tumor and two patients with EMR resection and pathologic adenocarcinoma and high-grade neoplasia. Intranasal injection of methylene blue was performed 1 day before operation. With tracheal intubation after general anesthesia, the patient to take the supine position, head low foot high 150- 200, tilt 150 to the right. The surgeon and the mirror assistant stand on the right side of the operating table, the first assistant stands on the left. Umbilical upper edge for 10 mm arc incision into the laparoscopic lens, using 4 or 5 holes for surgery.

Left foot and umbilical side of the left 6cm were placed 5 mm in diameter Trocar, right lower abdomen and umbilical side of the right 6cm were placed 10 mm and 5 mm of the Trocar. The pneumoperitoneal pressure was set at 1214 mm Hg (1 mm Hg = 0.133 kPa). First laparoscopic exploration of the whole abdominal cavity and to find the

site of the lesion, including a large invasion of the serosa of the tumor and preoperative position by the methylene blue positioning. If the lesion is not clearly identified, the laparoscopic brightness of the lumbar endoscopy is reduced with the intestine of the intestine where the tumor is temporarily closed, and the colon can be positioned from the anus into the lesion. Laparoscopic surgery with large vascular clip marked tumor where the intestine. Complete the inspection and positioning retraction mirror and pumping the intestine gas.

**3.3 Statistical methods**

Using SPSS18.0. The data were processed by the software. The measurement data were expressed by the mean and negative standard deviation (x ± s), and the t test and the counting data rate (%) were used. The χ test showed that the difference was significant Statistical significance.

**3.4 Results**

The clinical effect of laparotomy group and laparoscopic surgery group was compared between operation time, operation blood loss and postoperative complications. The operation time of laparoscopic surgery was significantly longer than that of open surgery, but the postoperative bleeding volume and postoperative complications were significantly better than laparotomy.

**Table 2:** Comparison of the indicators of the observation group and the control group

	Open surgery (n=32)	Laparoscopic surgery (n=32)	t	p
Surgery time (min)	141	182	2.83	0.082
Surgical bleeding volume (ml)	186	132	1.69	0.041
Postoperative complications (number)	8	2	—	—

**4. CONCLUSIONS**

The operation time of laparoscopic surgery was significantly longer than that of open surgery, but the postoperative bleeding volume and postoperative complications were significantly better than laparotomy. Therefore, the choice of laparoscopic radical resection of colorectal cancer is feasible, it is recommended.

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