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SELECTION OF THERAPEUTIC STRATEGIES AFTER PREOPERATIVE NEOADJUVANT CHEMORADIOTHERAPY FOR RECTAL CANCER

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ABSTRACT

Rectal cancer is one of the most common malignant tumors in China, which is mainly middle and low rectal cancer. Due to the particularity of the physiological and anatomical location of the rectum and the neglect of the relevant clinical symptoms, patients with rectal cancer in real life often have the local progression stage. A large number of studies have shown that neoadjuvant chemoradiotherapy should be performed in such patients, to achieve tumor downstaging before rectal cancer surgery. In this study, different treatment measures for rectal cancer patients after neoadjuvant chemoradiotherapy are presented.

INTRODUCTION

Meanwhile, relevant studies showed that after 6-12 weeks of neoadjuvant chemoradiotherapy, the clinical response rate (clinical complete response, cCR) was 10% to 30%, while the pathological response (pathological complete response, pCR) after total mesorectal resection (TME) was 10% to 20% [1,2]. Clinical remission rate refers to that imaging examination and colonoscopy pathological biopsy indicates tumor remnant after neoadjuvant radiotherapy and chemotherapy. Postoperative pathological response rate refers to the standard total mesorectal resection with postoperative specimen confirmed no tumor cells.

However, there are obvious differences between different scholars on what treatment measures should be taken for rectal cancer patients after neoadjuvant chemoradiotherapy. The relevant treatment measures are summarized as follows.

RESULTS AND DISCUSSION

1. Wait to watch the strategy: That is, through close follow-up observation and multidisciplinary cooperation, radical surgery is temporarily not performed for rectal cancer

patients with CCR after neoadjuvant treatment to obtain continuous CCR and thus avoid unnecessary surgery with treatment strategies. This treatment strategy was first reported by Habrgama et al. in Sao Paulo Hospital, Brazil. After continuous improvement of the research process and expansion of its sample size, the study concluded that there was no statistical difference between the 5-year survival rate and recurrence-free survival rate between the waiting observation strategy group and the direct surgery group, and during the follow-up, the local recurrence tumor was prone to radical surgery. This conclusion was supported by a propensity score-matched cohort analysis study published by the Lancet. This study included 259 patients, 228 of who opted for surgical resection after neoadjuvant chemoradiotherapy, 31 who were considered by the multidisciplinary team for observing and waiting for the indication. The results showed that there was no significant difference in survival rate and recurrence rate, but 34% of the observation group had local regeneration, mainly in the first 2 years, and most of the salvage measures. This means that more than 60% of people avoid major surgery (i. e. keeping organs preserved), a quarter can avoid permanent colostomy, and patients do not lose oncological safety for the first 3 years. The data from this study suggest that patients in clinical complete response through observation and waiting for treatment survive longer [5] than those treated with standard surgical resection.

Several studies have shown that there is no statistical difference in survival and survival rates between the waiting group and PCR groups, but the National Comprehensive Cancer Network (NCCN), the European Annual Conference of Internal Oncology (ESMO) and the Chinese Society of Clinical Oncology (CSCO) are all very cautious about the waiting strategy.

Investigate its reason:1. The above-related studies are retrospective studies, with great heterogeneity in the inclusion of cases, the formulation of treatment plans and the evaluation of follow-up strategies;2.

Although the waiting observation group can provide patients with an individualized treatment plan and the same prognosis, there is still a risk of local recurrence and metastasis, which means that a certain proportion of patients cannot benefit from the waiting observation strategy, and regenerative tumor cells need surgical resection, thus causing long-term metastasis and recurrence risk of patients [6];3.

Tumor burden has an impact on patient prognosis. Habr-Gama study shows that for T, the early local regeneration rate of T3-4 patients is significantly higher than that of T1-2, and the related prognosis is worse than that of patients without local growth [7]. At the same time, the rectal regional lymph status is also a significant reason for the waiting observation strategy, the more the number of lymph node metastasis, the greater the risk of recurrence and metastasis, the study of Park lymph node involvement with the advancement of ypT stage, ypT 117.1%, ypT 2 patients is 20.8%, so when entering the waiting observation group, should consider rectal cancer stage and peripheral lymphatic invasion [8];4.

The waiting observation strategy must be based on the accurate judgment of cCR, while relevant studies show that its accuracy is low (about 40% -80%). [9,10], and the clinical criteria for predicting pCR through cCR have not fully reached a consensus. Tumor withdrawal after neoadjuvant chemoradiotherapy has spatial heterogeneity. A considerable part of locally advanced tumors disappear in the mucosa and submucosa after treatment but only remain in the muscle layer, which easily leads to negative materials. This partly explains the inability to predict PCR by ccr[11];5. NCCN guidelines considered in the discussion that the expert group recommended conventional adjuvant therapy for patients with chemoradiotherapy, including FOLFOX or Xelox, combination regimen or 5-FU monotherapy, with a course of 4 months. There is no conclusion about whether neoadjuvant radiotherapy and waiting patients need adjuvant chemotherapy, adjuvant chemotherapy

course and regimen, and patients lack standardized follow-up program, and whether patients should follow the principle of postoperative adjuvant therapy.

A "for Chinese clinicians rectal cancer new adjuvant treatment after waiting observation therapy questionnaire", points out that Chinese doctors to "waiting" cognitive level and acceptance is not high, prompting the future need to establish "waiting" registration database, and carry out the corresponding clinical research, form the domestic expert consensus, to guide the "waiting" therapy in clinical application [12].

2. Transanal microscopic microsurgical resection:

According to the treatment guidelines, transanal endoscopic microsurgery is recommended for patients with early low rectal cancer (T1), which can preserve anal function and reduce the complication rate [13]. At the same time, Li et al. showed that neoadjuvant chemoradiotherapy has the advantages of tumor decline, reducing the local recurrence rate of patients, and improving the disease-free survival rate of patients, including [14]. Based on this study, whether transanal microscopic microsurgical resection can be performed directly in patients with reduced T1 or T2 stages after neoadjuvant chemoradiotherapy.Giancarlo Contrast for neoadjuvant chemoradiotherapy after early rectal cancer patients, transanal microsurgery treatment and direct total mesorectal resection patients postoperative quality of life, study follow-up patients after 1 month, 6 months and 1 year after the quality of life score, the results of patients with quality of life score higher [15].

Roberto et al. A systematic review of long-term tumor outcomes after local resection after neoadjuvant therapy showed that for 5-year survival and tumor-free survival between local and radical resection, organ retention seems to be an alternative treatment [16].At the same time, Lezoche et al study results showed that about 24% of patients can avoid the [17] of permanent stoma by local resection.

However, the unavoidable disadvantage of patients with local resection is that the perirectal lymph nodes cannot be obtained. The Tea study compared the tumor outcomes after preoperative radiotherapy and chemotherapy in patients with pathological T0 (ypT 0) rectal cancer and strictly included ypT0N0 91 cases or ypT0N1-2 85 cases, with the 5-year disease-free survival rate of 88.4% in the ypT0N0 group and 33.3% in the ypT0N1-2 group. The 5-year overall survival rate of ypT0N0 was 91.3% and ypT0N1-2 was 62.5%. The results suggested that the prognosis and survival rate of patients with early rectal cancer were better than those with lymph node invasion, and the presence of residual cancer cells in the mesangial lymph nodes was a risk factor for distant metastasis [18].

For patients with early T stage after neoadjuvant radiation therapy and no perirectal lymphatic invasion indicated by relevant imaging such as color ultrasound, CT and pelvic magnetic resonance, the author believes that the method of local resection can replace the method of membrane resection of the whole rectum to improve the anal preservation rate of patients and optimize the quality of life of patients.

3. Total mesorectal resection:

NCCN was first proposed in the early 1920s, and patients diagnosed with locally advanced rectal cancer can be evaluated before surgery, and whether neoadjuvant chemoradiotherapy is feasible. In the 2011 edition of the guidelines, neoadjuvant radiochemotherapy (nCRT) + total mesorectal resection (TME) + postoperative adjuvant chemotherapy was the preferred treatment for locally advanced rectal cancer, referred to as "sandwich therapy". At present, most of the national treatment standard is 6-8 weeks after long-course nCRT treatment, which can maximize the survival rate and disease-free survival rate of patients, and improve the prognosis of patients to achieve the purpose of radical tumor treatment.

CONCLUSION

In conclusion, after neoadjuvant locally advanced rectal cancer, appropriate treatment strategies should be selected in combination with the stage of tumor cells and related oncology indicators to improve the survival time and quality of life. At the same time, according to China's national conditions, because clinicians have a different grasp of relevant treatment measures and the differences in diagnosis and treatment levels in different regions, they should establish a large-scale multi-center diagnosis and treatment mechanism, establish a complete waiting observation and discussion team, and standard local resection to provide individualized medical plans for patients with advanced rectal cancer.

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CONFLICT OF INTEREST

The authors declare no conflict of interest.

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