

83855_Auto_Edited.docx

1

Name of Journal: *World Journal of Clinical Cases*

Manuscript NO: 83855

Manuscript Type: CASE REPORT

Metastatic colon cancer treated using traditional Chinese medicine combined with chemotherapy: A case report

Deng *et al.* Metastatic colon cancer and traditional Chinese medicine

Chen-Geng Deng, Meng-yuan Tang, Xue Pan, Zhao-heng Liu

Abstract

BACKGROUND

Colon cancer (CC) is one of the leading causes of cancer-related morbidity and mortality worldwide. Traditional Chinese medicine (TCM) is widely used in the treatment of various chronic diseases. CC easily metastasizes and results in high morbidity and mortality rates.

CASE SUMMARY

A 71-year-old man with an approximately 12-year history of old myocardial infarction and 7-year history of type 2 diabetes mellitus was diagnosed with CC and underwent right hemicolectomy 1 year ago. Tumor biopsy revealed moderately poorly differentiated adenocarcinoma. Subsequently, chemotherapy with oxaliplatin and paclitaxel was administered. Anastomosis recurrence and pelvic metastasis were noted 37 days later. The patient received eight 21-day cycles of adjuvant chemotherapy with oxaliplatin and capecitabine after recurrence; however, the tumor persisted and chemotherapy-related liver damage developed gradually. Thus, he was advised to take Chinese medicine for the recurrence and pelvic metastasis. Metastatic CC was cured after receiving TCM combined with long-term chemotherapy.

CONCLUSION

TCM may effectively treat patients with metastatic CC.

Key Words: Metastatic colon cancer; Traditional Chinese medicine; Tumor; Pelvic metastasis; Chemotherapy; Case report

Deng CG, Tang MY, Pan X, Liu ZH. Metastatic colon cancer treated using traditional Chinese medicine combined with chemotherapy: A case report. *World J Clin Cases* 2023; In press

Core Tip: Herein, we report the case of a patient with metastatic colon cancer (CC) who underwent right hemicolectomy and received eight cycles of chemotherapy coupled with traditional Chinese medicine (TCM), after which he was finally cured. There was no recurrence during the subsequent follow-up. We believed that TCM can provide a new postoperative treatment modality for CC because the patient's enteroscopy revealed that the anastomotic stoma of the transverse colon had become smooth 7 months after treatment.

INTRODUCTION

Colon cancer (CC), ⁴ the third most common cancer worldwide, is one of the leading causes of cancer-related morbidity and mortality. It generally occurs among people aged > 70 years. Common therapies for CC include adjuvant chemotherapy, palliative chemotherapy, and palliative targeted therapy^[1]. However, palliative chemotherapy only provides limited benefits in terms of prolonging progression-free survival, alleviating symptoms, and improving the quality of life of patients, without offering a cure for the disease. Surgery for CC that invades other organs or structures can be challenging^[2]. Traditional Chinese Medicine (TCM) offers specific treatment approaches

for delaying disease progression, and therefore, may emerge as a significant alternative treatment for CC.

Right-sided cancers are typically reported in CC. Herein, we report ⁵ a case of a 71-year-old man with a 12-year history of old myocardial infarction and a 7-year history of type 2 diabetes mellitus who was successfully treated for metastatic CC with a combination of TCM and long-term chemotherapy. The details of the case are presented ³ in accordance with the CARE reporting checklist.

CASE PRESENTATION

Chief complaints

A 71-year-old male patient with a 12-year history of prior myocardial infarction and a 7-year history of type 2 diabetes mellitus was admitted to our hospital for further evaluation and treatment of postoperative metastatic CC.

History of present illness

Upon admission to our hospital, the patient was diagnosed with CC and underwent right hemicolectomy 6 mo earlier. He also complained of numbness and tingling in the limbs in the past 3 years and had lost 10 kg in the past 6 months; However, he did not present with symptoms such as fever, cough, chest pain, chest tightness, abdominal pain, or abdominal distention. Tumor biopsy revealed moderately poorly differentiated adenocarcinoma (Figure 1). Postoperative immunohistochemical results revealed tumor invasion of the deep muscular layer, extending to the serosal layer (Figure 2).

Anastomosis recurrence and pelvic metastasis were noted 37 days later (Figure 3). Meanwhile, chemotherapy-related liver damage developed slowly. During a hospital visit, an irregular-density shadow of soft tissue was observed near the anastomotic stoma of the transverse colon, with a size of approximately 1.4 cm × 0.9 cm (Figure 4).

History of past illness

The patient received eight cycles of adjuvant chemotherapy with oxaliplatin and capecitabine after right hemicolectomy.

1

Personal and family history

The patient had no personal or family history.

Physical examination

His vital signs were as follows: temperature, 36.1°C; blood pressure level, 117/62 mmHg; heart rate, 86 beats/min; and respiratory rate, 20 breaths/min.

Laboratory examinations

The levels of tumor markers, including alpha-fetoprotein, carcinoembryonic antigen and cancer antigen 199, showed an increasing tendency (Table 1). Other laboratory test findings were generally normal.

Imaging examinations

His previous medical records suggested moderately poorly differentiated adenocarcinoma (Figure 1). Postoperative immunohistochemical results revealed tumor invasion of the deep muscular layer, extending to the serosal layer (Figure 2). Anastomosis recurrence and pelvic metastasis were noted 37 days later (Figure 3). During a hospital visit, an irregular-density shadow of soft tissue was observed near the anastomotic stoma of the transverse colon, with a size of approximately 1.4 cm × 0.9 cm (Figure 4A).

FINAL DIAGNOSIS

The final pathological diagnosis after laboratory and imaging examinations was metastatic CC (stage T2N2bM1a).

TREATMENT

We advised the patient to take Chinese medicine and prescribed a regimen consisting of Huangqi (45 g), Chenpi (15 g), Daxueteng (30 g), Baijiangcao (10 g), and Shancigu (15 g).

OUTCOME AND FOLLOW-UP

Computed tomography revealed that the recurrent neoplasm disappeared after 37 days of sustained medication, and a reexamination performed 4 months later revealed no recurrence (Figures 4B and C). Additionally, enteroscopy performed 7 months later showed that the anastomotic stoma of the transverse colon had become smooth (Figure 5). These findings were consistent with the changes in the patient's tumor marker levels (Table 1).

DISCUSSION

Herein, we reported the case of a patient with recurrent metastatic CC after right hemicolectomy who received eight cycles of chemotherapy combined with TCM and was finally cured. No recurrence was noted during subsequent follow-up. TCM may provide a new treatment modality for CC postoperatively because the patient's enteroscopy revealed that the anastomotic stoma of the transverse colon had become smooth 7 mo after treatment.

Currently, the recommended treatment for CC includes surgical resection of cancer and counseling of patients to receive adjuvant chemotherapy, palliative chemotherapy, or palliative targeted therapy^[3,4]. The current management of disseminated metastatic CC involves various active drugs (either in combination or as single agents), including 5-fluorouracil/leucovorin, capecitabine, irinotecan, oxaliplatin, bevacizumab, cetuximab, panitumumab, ziv-aflibercept, ramucirumab, regorafenib, trifluridine-tipiracil, pembrolizumab, and nivolumab^[5]. Treatment personalization allows patients to maximize benefits while minimizing harm, thereby enabling optimal survival and quality of life^[6]. Most patients show good curative effects and high long-term survival rates. The number of patients undergoing surgical resection has increased the associated mortality and morbidity, although approximately 10.8% of patients who

undergo colectomy for CC have metastatic diseases^[7]. However, combination chemotherapy is associated with additional toxicity, which is harmful to patients^[8].

Our treatment approach aimed to achieve several goals: elimination of recurrence and metastatic CC in the pelvis, reduction of chemotherapy-related liver toxicity, and improvement of the patients' overall quality of life. To achieve these goals, we utilized TCM to dispel cold, remove dampness, reduce phlegm, and resolve masses, as well as to provide detoxifying effects. Huangqi is widely used as an immune stimulant, tonic, antioxidant, hepatoprotectant, diuretic, expectorant, and antidiabetic and anticancer agent^[9]. It can enhance the body's natural defense mechanisms. Astragaloside might contribute to the immunostimulating and anticancer effects of Huangqi, which have been demonstrated in clinical trials and animal experiments^[10]. Shancigu extract can significantly inhibit the proliferation of human CC SW480 cells and induce apoptosis^[11]. Another study revealed the role of active components of Baijiangcao in CC treatment^[12]. Other herbs, such as Daxueteng, are also known to exert antitumor effects. Daxueteng and Baijiangcao can play an important role in intestinal diseases and enhance human immunity. The addition of TCM in the treatment regimen enhances the abovementioned effects.

This report has several limitations that preclude us from drawing definitive conclusions. Firstly, it is a single case report, and the evidence level of this treatment approach is insufficient. While we can adjust the prescription slightly based on different conditions, more research is needed to establish the efficacy of TCM combined with chemotherapy. Secondly, the follow-up period is limited, and long-term follow-up is required to confirm the clinical validity of this treatment modality.

CONCLUSION

TCM may effectively cure recurrence and metastatic CC. Thus, the successful experience of curing metastatic CC after laparoscopic radical resection using TCM is meaningful and imperative. However, further investigations are warranted to confirm the efficacy and mechanisms of TCM treatments for CC.

ORIGINALITY REPORT

7%

SIMILARITY INDEX

PRIMARY SOURCES

1	f6publishing.blob.core.windows.net Internet	31 words — 2%
2	"Colon Cancer Diagnosis and Therapy Vol. 3", Springer Science and Business Media LLC, 2022 Crossref	28 words — 2%
3	www.wjgnet.com Internet	21 words — 1%
4	bmcgastroenterol.biomedcentral.com Internet	15 words — 1%
5	bsdwebstorage.blob.core.windows.net Internet	13 words — 1%

EXCLUDE QUOTES ON
EXCLUDE BIBLIOGRAPHY ON

EXCLUDE SOURCES < 12 WORDS
EXCLUDE MATCHES < 12 WORDS