

## Nursing Experience of Moxibustion Therapy in a Patient with Post-Chemotherapy Oral Ulcers: A Postprint

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**Date:** 2023-06-12T00:00:00+00:00

### Abstract

**Objective** To explore the efficacy of moxibustion therapy for chemotherapy-induced oral ulcers. **Methods** Moxibustion therapy was administered to a cancer patient who developed oral ulcers following chemotherapy. **Results** The patient's oral ulcers were cured following moxibustion therapy. **Conclusion** Moxibustion therapy demonstrates efficacy in treating oral ulcers after chemotherapy, achieves the expected therapeutic effect, and warrants clinical promotion and application.

### Full Text

## Nursing Report on Moxibustion Therapy for a Patient with Oral Ulcer After Chemotherapy

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### Abstract

**Objective:** To explore the effect of moxibustion therapy on oral ulcer after chemotherapy.

**Methods:** Moxibustion therapy was used to treat a tumor patient with oral ulcer after chemotherapy.

**Results:** The oral ulcer of the tumor patient was cured by moxibustion therapy.

**Conclusion:** Moxibustion therapy is effective in the treatment of oral ulcer after chemotherapy, and can achieve the expected therapeutic effect, which is worthy of clinical application.

**Keywords:** Moxibustion Therapy; Oral Ulcer; Nursing Care

## Introduction

Colon cancer is a common malignant tumor of the digestive tract in China, with high morbidity and mortality rates, ranking fourth among gastrointestinal tumors globally. Its incidence is showing a clear upward trend worldwide. Chemotherapy is one of the effective means for treating tumors, but it often brings adverse reactions. Oral mucositis is one of the common complications of chemotherapy, with an incidence of approximately % after standard-dose chemotherapy and nearly % in patients receiving high-dose chemotherapy [1]. Oral ulcers, a complication of oral mucositis (OM), are inflammatory and/or ulcerative, painful diseases of the oral mucosa that frequently occur on the inner lips, tongue surface, and buccal mucosa. They are characterized by recurrence and self-limitation, with a single episode lasting approximately d days, and may be accompanied by systemic symptoms such as chronic pharyngitis, halitosis, and lymphadenopathy. Oral pain caused by oral mucositis leads to eating and communication disorders, severely affecting patients' quality of life, forcing treatment interruption, and even causing sepsis and death [2]. Currently, there is no specific effective treatment, and patients often exhibit fear of chemotherapy.

Modern Chinese medicine employs flexible treatment strategies for oral ulcers, emphasizing not only traditional heat-clearing and detoxification, yin-nourishing and fire-purging methods, but also blood-activating and phlegm-resolving, qi-supplementing and yin-nourishing, and kidney-tonifying and spleen-strengthening approaches. The medicinal properties of moxibustion can enter the body through acupoints on the body surface, penetrate various meridians, and exert therapeutic effects. It can also enter the body through respiration to strengthen healthy qi, dispel pathogenic factors, unblock meridians, and calm the mind [3]. Combining Chinese medicine with Western treatment methods can alleviate chemotherapy-induced discomfort without affecting chemotherapy efficacy, providing patients with a gentle and comfortable therapeutic option.

Patients were instructed to relax, informed about the effectiveness of moxibustion therapy with examples, to eliminate anxiety and gain their trust for active treatment cooperation. They were advised to avoid spicy foods and not to drink water that is too hot.

## Clinical Data

The patient was diagnosed with transverse colon malignant tumor and received chemotherapy with bevacizumab plus capecitabine for cycles. On day after the cycle of chemotherapy, the patient developed bone marrow suppression and recurrent oral ulcers. More than ten superficial ulcers the size of millet grains were visible on the lower lip and anterior tongue, with slightly concave centers, surrounding erythema, and scattered distribution. Bilateral submandibular lymph nodes were swollen and painful, with an NRS score of , severely affecting eating. Admission symptoms included fatigue, obvious pain from lower lip oral ulcers,

five-center heat (palms, soles, chest), and abdominal cold sensation. Syndrome differentiation identified spleen-kidney deficiency.

### **Nursing Intervention**

A combined technique approach was adopted, using acupoint massage combined with ginger rubbing and moxibustion treatment, administered by the responsible nurse according to physician orders.

### **Moxibustion Technique Implementation [4]:**

First, acupoint massage was performed using the thumb to press, knead, and rub each acupoint for min. The selected acupoints were Sanyinjiao (SP6) and Yongquan (KI1). Next, ginger rubbing was applied using a mm-thin slice of fresh ginger rubbed on the acupoints until the skin turned slightly red. This was followed by mild moxibustion, then sparrow-pecking moxibustion, and finally revolving moxibustion for min daily. Finally, another min of acupoint massage could be performed. After treatment, the moxa stick was removed, the skin was wiped clean, and the patient was instructed to rinse with normal saline.

### **Dietary Guidance:**

Patients were guided to follow a high-calorie, high-protein, high-vitamin, easily digestible diet principle, including lean meat, soy products, and fresh vegetables [5], with emphasis on foods rich in vitamin B.

### **Combined Treatment with Jianpi Jiedu Decoction:**

The decoction consisted of raw Astragalus g, Honeysuckle g, stir-fried Atractylodes g, Dandelion g, stir-fried Hyacinth Bean mL, and raw Licorice g. Prepared by our department's pharmacy, each dose was divided into portions, taken minutes after meals, twice daily, for consecutive days.

### **Precautions:**

(1) During moxibustion, maintain concentrated attention and proper distance to avoid burns. For patients with dull skin sensation or children, place the index and middle fingers on both sides of the moxibustion area to perceive temperature, ensuring good effect without skin injury. (2) Moxibustion should be applied progressively. For first-time users, start with small stimulation, short duration, and fewer moxa cones, then gradually increase dosage rather than starting with large doses. (3) Keep warm and avoid exposure to cold after moxibustion. (4) Moxibustion is not suitable for those who are excessively hungry, fatigued, mentally stressed, or intoxicated.

### **Effect Evaluation**

#### **Efficacy Criteria [6] (Acute and Subacute Toxicity Reaction Grading Standards for Anticancer Drugs):**

0 degree: Mucosal erythema with pain, no effect on eating

I degree: Obvious mucosal erythema, increased pain, scattered ulcers, able to eat semi-liquid diet

II degree: More severe mucosal ulcers and pain than I degree, only able to eat liquid diet

III degree: Severe pain, confluent ulcers, unable to eat

**Treatment Outcomes:**

Ulcer pain decreased, ulcers converged with reduced area compared to before, and ulcers healed without pain. Abdominal cold sensation improved.

**Discussion**

Oral mucositis belongs to the categories of “mouth sores” and “mouth ulcers” in Traditional Chinese Medicine. The tongue is considered the sprout of the heart, with heart meridians distributed on the tongue. If heart fire flares upward and steams the mouth, mouth sores develop. *Lingshu · Maidu* states: “Heart qi connects to the tongue, spleen qi connects to the mouth; the mouth and tongue are external signs of heart and spleen.” Chao Yuanfang in *Zhubing Yuanhou Lun · Kou She Chuang Hou* of the Sui Dynasty wrote: “Hand Shaoyin is the heart meridian, heart qi connects to the tongue; Foot Taiyin is the spleen meridian, spleen qi connects to the mouth; when organ heat is excessive, heat attacks heart and spleen, qi rushes upward to mouth and tongue, causing mouth and tongue sores.” *Zhengzhi Zhunsheng* states: “The heart belongs to sovereign fire, being the master of all organ fires; therefore, heat in all meridians responds to the heart.” Thus, fire from all organs can respond to the heart, causing mouth sores—in other words, all organs can cause mouth sores, not just the heart. Based on this, the etiology and pathogenesis of oral mucositis are: due to fire-heat, attributed to heart and spleen, with the main organs being heart and spleen, though changes in other organs can also cause it. First, chemotherapy easily damages spleen and stomach, causing spleen-stomach dysfunction in transportation and transformation, inability to generate and nourish qi and blood, leading to mouth sores, with pathogenesis of spleen-stomach qi deficiency. Second, deficiency of yin fluid in heart, spleen, and kidney generates internal heat, with deficient fire flaring upward, scorching mouth and tongue, forming ulcers, with pathogenesis of yin deficiency with fire effulgence.

Cui Renming believes chemotherapy-induced oral mucositis is primarily a deficiency pattern [7]. Moxibustion can warm yang, dispel cold, and guide fire back to its origin, allowing lower jiao yang qi to be replenished and upper jiao floating deficient yang to return to its proper place, thereby eliminating symptoms [8]. Zusanli (ST36) belongs to the Foot Yangming Stomach Meridian, with functions of regulating immunity, enhancing disease resistance, supplementing middle qi, unblocking meridians, and supporting healthy qi while dispelling pathogenic factors [9]. Moxibustion uses mugwort combustion to apply heat stimulation near relevant acupoints, with effects of dispelling dampness and cold, unblocking meridians, and reducing swelling. Modern physiotherapy believes moxibustion’s thermal effects can stimulate capillary dilation, increase blood flow and tissue metabolism, improve gastrointestinal blood circulation and nutrition of mucosal epithelial cells, and promote recovery of bodily state and gastrointesti-

nal function. Simultaneously, the thermal stimulation during fumigation can promote inhibition diffusion in the cerebral cortex, reduce nerve excitation, and provide analgesic and sedative effects. Zhongwan (CV12), Zusanli (ST36), and Neiguan (PC6) are collectively called the “Three Stomach Disease Acupoints.” Zhongwan is the main acupoint on the Conception Vessel, treating vomiting, acid regurgitation, and poor appetite. Zusanli is the He-sea point of the Foot Yangming Stomach Meridian, treating vomiting and gastric pain, effectively improving post-chemotherapy gastrointestinal reactions. Neiguan is a commonly used acupoint. Combined use of these acupoints can harmonize the stomach, descend qi, strengthen the spleen, and regulate qi [10].

Under the action of external pathogenic factors, dampness-heat accumulates in oral mucosa, causing poor qi and blood circulation. Chemotherapy-induced oral mucositis is therefore classified into yin deficiency with fire effulgence type, dampness-heat internal excess type, and spleen-stomach deficiency type. The patient presented with several rice-grain-sized, light-red ulcer points in the mouth, usually painless but painful when drinking hot water or eating hot food, accompanied by low mood, indifferent expression, five-center heat, tidal fever, night sweats, sore waist and knees, insomnia, and normal bowel movements and urination. The tongue was pale red with thin white coating, and the pulse was thready and weak. Cancer patients undergoing radiotherapy and chemotherapy already have qi and blood deficiency and anxiety, and combined with the patient’s age and physiological characteristics, kidney yin deficiency symptoms appear.

Pain, sleep disorders, negative emotions, and cancer-related fatigue interact with each other, severely affecting cancer patients’ quality of life. Moxibustion has the effect of regulating qi, harmonizing the stomach, and regulating organ qi. Through thermal stimulation and medicinal effects, moxibustion can warm yang and supplement deficiency, warm and unblock meridians, balance yin and yang, and regulate organ qi, thereby effectively improving the overall quality of life of chemotherapy patients. Gingival swelling and pain, oral ulcers, sore throat, and sleep problems in chemotherapy patients all belong to the manifestation of deficient fire floating upward, and moxibustion can improve these symptoms.

Chemotherapy belongs to the category of “attacking methods” in Traditional Chinese Medicine. Chemotherapy drugs easily damage patients’ spleen and kidney, causing spleen-kidney yang deficiency patterns. If patients have insufficient kidney yang with internal yin cold, rootless fire can float outward, causing the phenomenon of fire not returning to its origin. Yin fire can travel upward through the three yin meridians to the mouth and throat, causing mouth sores and oral erosion. Traditional Chinese Medicine believes the human body is an integrated whole, and local symptoms are manifestations of yin-yang imbalance. Toothache and sore throat after chemotherapy belong to the pathogenesis of deficient yang floating upward. Moxibustion is used to address these post-chemotherapy symptoms.

## References

- [1] Xu Limin, Xiao Yu, Sun Shaohua. Analysis of the significance of high-quality nursing intervention for patients undergoing laparoscopic radical resection of colorectal cancer[J]. China Medicine.
- [2] Yang Ping, Qiao Mingqi, Wang Haijun, et al. Qiao Mingqi's experience in treating oral ulcers after radiotherapy and chemotherapy with integrated traditional Chinese and Western medicine[J]. Hubei Journal of Traditional Chinese Medicine.
- [3] Huang Feng, Xie Jingui, Chen Meihua. Evaluation of the effect of warming yang and strengthening spleen method combined with moxibustion in treating recurrent oral ulcers[J]. Health Horizon.
- [4] Xie Xinxu, Liu Peng, Jia Jing, et al. Comparative study on several anticancer chemotherapy drug-induced oral ulcer models in rats[J]. Chinese Pharmacological Bulletin.
- [5] He Zhongning, Wang Baoquan, Zhang Peitong. Systematic evaluation of modified Gancao Xiexin Decoction in treating oral ulcers after radiotherapy and chemotherapy[J]. World Chinese Medicine.
- [6] Li Xiaohong. The role of evidence-based nursing model in preventing oral ulcers in leukemia patients undergoing chemotherapy[J]. Diet Health.
- [7] Chai Xianhui, Qin Fangmin. The role of Jianpi Jiedu Decoction combined with moxibustion in oral ulcers after tumor chemotherapy[J]. Sichuan Traditional Chinese Medicine.
- [8] Zeng Qingping. The influence of evidence-based oral nursing intervention on nursing satisfaction of patients with chemotherapy-induced oral ulcers[J]. Chinese Health Care.
- [9] Mai Xi. Treatment of cases of recurrent oral ulcers with modified Lizhong Decoction combined with moxibustion[J]. Henan Traditional Chinese Medicine.
- [10] Li Bi'e, Wang Huan, Liu Qiliang, et al. Clinical observation of Chaihu Guizhi Ganjiang Decoction in treating recurrent oral ulcers of gallbladder heat and spleen deficiency type[J]. Journal of Guangzhou University of Traditional Chinese Medicine.
- [11] Cheng Sen, Zhang Jianfeng, Liu Yan, Liu Yunxia. Research progress on Traditional Chinese Medicine treatment of chemotherapy-induced oral mucositis[J]. New Chinese Medicine.
- [12] Yang Shengkun, Wang Zongchao. Clinical observation of Zusanli acupoint injection combined with Kangfuxin Solution in treating oral ulcers after chemotherapy[J]. Integrated Traditional Chinese and Western Medicine Research.
- [13] Li Na, Chen Feijuan, Zuo Cui. Influence of moxibustion combined with acupoint massage on gastrointestinal reactions and nursing satisfaction of breast cancer chemotherapy patients[J]. Qilu Nursing Journal.
- [14] Song Jiating, Huang Qihua, Wen Xi, et al. Influence of moxibustion therapy under the guidance of guiding fire back to origin theory on cancer-related fatigue in gynecological tumor chemotherapy patients[J]. Guangzhou University of Traditional Chinese Medicine Journal.

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