

# *A Preliminary Study on the Treatment of Lung Cancer with Traditional Chinese Medicine Guided by the Thought of "Survival with Tumor"*

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**Abstract:** Malignant tumors are currently the diseases with the highest morbidity and mortality worldwide. Modern medicine takes "tumor-free survival" as the main goal, however, the current anti-tumor means are difficult to completely eradicate the tumor. Tumor-bearing survival is proposed in view of the reality that tumors cannot be completely eradicated from the human body, and its essence is to improve the quality of life of patients and prolong the life cycle as much as possible on the basis of the common survival of human tumors. The World Health Organization points out that malignant tumors are treatable controllable but incurable diseases, and this view is consistent with the idea of tumor-bearing survival, and effective treatment does not necessarily require complete tumor eradication. Therefore, it is of great significance to intervene the tumor growth, improve the quality of life and prolong the survival time of patients with lung cancer through TCM syndrome differentiation and treatment. In summary, this paper discusses the meaning of tumor-bearing survival, the etiology and pathogenesis of lung cancer, the focus of traditional Chinese medicine in the treatment of advanced lung cancer under the guidance of tumor-bearing survival and clinical medical records, in order to enlighten and guide the clinical improvement of the quality of life of patients with lung cancer and prolong the life cycle.

## 1. Introduction

Lung cancer refers to lung malignant tumors that occur in bronchi, mucous membranes, or glands at all levels and are characterized by local reality and systemic deficiency. Lung cancer has no obvious early symptoms, hence it is easy to escape diagnosis or be misdiagnosed. And the pathogenesis of lung cancer is unclear, and its diagnosis and treatment methods are limited. Many patients are clinically diagnosed in the middle and late stages, often missing the best opportunity for surgical treatment, resulting in a decrease in survival rate and an increase in

mortality rate. Based on the holistic view of traditional Chinese medicine and the unique thought of syndrome differentiation and treatment, and combined with modern medical disease differentiation and traditional Chinese medicine syndrome differentiation [1]. Give full play to the unique advantages of traditional Chinese medicine, achieve tumor-bearing survival, human tumor co-body, harmonious get along.

## **2. Definition and meaning of the idea of "survival with tumor"**

In 1997, Professor Zhou Daihan, an expert in traditional Chinese medicine oncology, has been engaged in the clinical work of cancer for more than 20 years, summarized clinical experience, published the "Summary of Cancer Treatment", and clearly stated the idea of "survival with tumor" [1], which has been widely recognized in the Chinese and Western medicine community. "The idea of survival with tumor has unique advantages, and it is considered that the human body is an organic whole and no longer sees tumor treatment, but changes from the concept of western medicine treatment of "human disease" to traditional Chinese medicine treatment of "disease person", syndrome differentiation and treatment, circular machine activation, disease and syndrome combination, so that the overall treatment is combined with personalized treatment and exerts the most beneficial therapeutic advantages. Professor Zhou emphasized that the pathogenesis of cancer is: "poison hair five viscera, poison root deep hidden", in which poison hair five viscera refers to visceral disease manifested in the local lesions; poison root deep hidden refers to the disease from the inside and table, insidious and a wide range [2]. The main clinical features are chronic, local is real (evil qi is real), and the whole body is virtual (positive qi deficiency). In the process of long-term treatment, vital qi loses, evil qi is not full, and the special stage when evil is confronting each other is suitable for tumor survival [2]. To righting and expelling pathogens, anti-cancer detoxification, conditioning the body, relieve clinical symptoms, shrink the tumor, so that tumor cells lose abnormal proliferation and differentiation ability, maintain the balance between the immune function of the body and the biological characteristics of the tumor, maximize the avoidance of tumor recurrence and metastasis, so that patients in the tumor-bearing state, positive optimism, full of positive energy to love life, correctly view the fear or hopelessness caused by the tumor and other adverse emotions. Because most patients with advanced malignant tumors have critical cancer pathogens, vital qi decline, and cannot be cured, the concept of tumor-bearing survival is mainly suitable for patients with advanced malignant tumors, especially systemic failure or the elderly.

## **3. Understanding of etiology and pathogenesis of lung cancer in traditional Chinese medicine**

Lung cancer is a systemic, malignant, chronic wasting disease, and the name of this disease is used jointly by Chinese and Western medicine. Traditional Chinese medicine (TCM) believes that the key to pathogenesis is the loss of vital qi in the body, the invasion of cancer toxin while virtual, resulting in phlegm-turbid cohesion, qi stagnation and blood stasis, heat evil cancer toxin accumulation in the lung, mutual blogging, resulting in lung loss and declaration and descending function.

### **3.1. Deficiency of vital qi plays a decisive role in the development of lung cancer**

"Su Wen" records that "vital qi is stored inside, evil can not be done" [3]. Since ancient times, major physicians believe that the occurrence of lung cancer is closely related to the body's righteousness. Vital qi is the body of the human body, is the functional activity of the human body, mainly including viscera, qi and blood, body fluid, meridians and other functions, as well as the

human body 's disease resistance and repair function that is, self-harmony state. It is a very subtle substance distributed inside and outside the body, running the whole body and promoting the functional movements of the viscera and body throughout the body. Exuberant vital qi in the human body is the body defense, self-regulation, resistance to pathogenic factors, rehabilitation ability is strong, the human body is not easy to develop the disease or after the onset of the disease is mild, easy to recover [4]. Weak righteousness, excessive evil toxin, is not enemy evil, evil toxin invasion, it affects the normal physiological function of the body and disease. Lung cancer disease location is mainly in the lung, lung qi lost in the Xuanfa Su Jiang, over time unhealed lung qi more virtual, or high and weak years, long illness damage yuan, late lung qi and yin loss, blood weakness, heart qi weakness, child disease offending mother, and cause spleen weakness, and maternal disease and son, long illness and kidney, resulting in kidney does not contain qi, yin and yang deficiency; "Jingyue Quanshu" said: "The lung is the main qi, kidney is the root of qi" [5]. Therefore, in the late stage, the lung involves the heart, spleen and kidney, and finally the vital qi of the body declines and the condition seriously worsens. Advanced lung cancer patients suffer unbearable pain, poor body function, difficult to resist in-depth cancer pathogens, the disease vicious cycle, so the treatment should be based on tumor survival, revitalization of vital qi, resistance to cancer virus, pay attention to invigorating qi and nourishing yin, benefiting the lung and invigorating the spleen and tonifying the kidney, righting the culture [5].

### **3.2. Exogenous pathogens, cancer toxins and pathological products are important conditions for the development of lung cancer**

The occurrence and development of human diseases are not only closely related to the vital qi of the human body, but also related to the pathological products caused by exogenous pathogens, cancer poison, as well as functional abnormalities such as various viscera and tissues of the human body, qi and blood, body fluid, and meridians. For example, the internal meridian cloud: "evil all together, its qi will be virtual" [6]. With the rapid development of social science and technology, the problems of social environment have become increasingly prominent, such as dust, industrial exhaust, automobile exhaust, soot oil and gas, etc. Traditional Chinese medicine believes that the lung dominates breathing, opens the orifices in the nose, evil enters the human body through the mouth and nose, affecting the normal function of the lung; eating disorders such as eating barbecue, pickled products and other foods, also adversely affect the body; modern medicine believes that smoking is the primary cause of lung cancer. Professor Zhou Zhongying, a master of Chinese medicine, put forward the cancer toxin theory to put forward new diagnostic and therapeutic ideas for the treatment of tumors in traditional Chinese medicine. What is poison in the end? According to ancient times, the statements are different, but in combination with traditional Chinese medicine, poison is "evil is poison" or "evil is accumulated for a long time is poison." Cancer virus has seven major properties. First, occult: at the beginning of the disease, it is difficult to find, found to have reached the middle and advanced stage, severe disease, difficult to thoroughly treat. Second, fierce: cancer poison if wounding, the condition develops extremely quickly, easy to deteriorate, the emergence of critical syndromes, even if the physical strength, is still difficult to avoid. Third, intractable: cancer poison is contained in the body, lingering unhealed, even after treatment symptoms relieved, the tumor shrank, if not continued treatment to consolidate the efficacy, easy to relapse, rapid progression. Fourth, flow: cancer virus invades the human body, variable and not fixed, will quickly transfer with the blood, lymph and other ways to other places, damage other normal tissues. Fifth, concurrent clip: cancer poison is easy to produce many pathological products of the body, such as phlegm, heat toxin, cold coagulation, blood stasis, qi stagnation and other mutual knots, the formation of compound pathogenesis leading to viscera dysfunction, qi and blood

movement disorder, the body's internal environment imbalance, cancer occurrence. 6. Positive damage: Because of its fierce nature, cancer virus pathogens are very easy to consume the qi, blood and body fluid of the human body, injure the viscera, cause deficiency of vital qi, make the five viscera exhausted, exhaust qi and blood, separate yin and yang, and appear dead yin or dead yang syndrome. That is, the so-called "Su Wen. Qi Tong Tian Lun" in the "Yin Ping Yang secret, spirit is governance, yin and yang leave the decision, essence is the end" [1]. Traditional Chinese medicine (TCM) believes that lung cancer is often on the basis of deficiency of vital qi, under the action of various pathogenic factors such as exogenous six evils, eating disorders, emotional abnormalities, drug toxicity, and frailty in the elderly, resulting in lung loss and declaration of purging, Qi turbulence, and abnormal body fluid operation and transfer of phlegm endogenous; "Yizong Bi Reading" has the saying: "The spleen is the source of phlegm, and the lung is the organ of phlegm storage" [7]; according to the relationship between the five elements, the lung is the son of the spleen, the lung is the son of the spleen, the child disease and the mother, resulting in spleen loss of health and transport, phlegm endogenous, and due to the spleen disease, maternal disease and son, phlegm on the offense, resulting in lung loss and declaration of purging, cough and phlegm and other symptoms [5]. Dampness evil blocking the middle coke, qi block for a long time, qi stagnation fire, involving the liver, liver loss up to, liver qi stagnation fire, wood fire gold, phlegm-heat cough; soil does not make water, resulting in kidney deficiency water pan, then cold phlegm cough [5]. Therefore, the treatment of phlegm to regulate the spleen and stomach this source, if phlegm turbidity did not change, over time heat, accumulated into fire poison. Long time affects the movement of qi and blood, resulting in qi stagnation and blood stasis. Therefore, lung cancer is caused by deficiency, this virtual standard, and the pathogenesis is complex and interlaced. Advanced lung cancer, complex and variable, mainly virtual: mainly qi deficiency, yin deficiency, phlegm, blood stasis, poison blocking the whole process of the implementation of the disease, phlegm, blood stasis, poison is not only the etiological factors of patients with advanced lung cancer, will lead to internal environment disorders, but also pathological products, aggravating the condition. Xie Changsheng et al. analyzed 561 patients with lung cancer and found that phlegm-turbid obstructing lung syndrome was more common in stage I, heat toxin accumulating lung syndrome was more common in stage II, and deficiency of both qi and yin syndrome was more common in stage III and IV [8].

#### **4. Stress points of traditional Chinese medicine "survival with tumor" in the treatment of advanced lung cancer**

Combined with the clinical practice of many physicians, it can be seen that traditional Chinese medicine has unique advantages in the treatment of advanced lung cancer based on the idea of "survival with tumor", so traditional Chinese medicine should be implemented and applied in the process of the occurrence and development of advanced lung cancer, and combined with modern scientific technology to regulate and treat, each takes its own strengths, supplements each other's shortcomings, relieves the sufferings of patients, and makes the idea of survival with tumor put forward scientific treatment methods and ideas for medicine.

##### **4.1. Alternative Therapies**

Alternative therapy, for tumors in a certain special stage or patients in specific conditions, western medicine helpless, Chinese medicine should be used as alternative therapy and maximize the benefits of patients. The conditions for patients who are not suitable for surgical treatment but are suitable for survival with tumor are as follows: First, the tumor has completely spread and metastasized to multiple sites; second, the tumor site is in the position of important organs, such as

brain, lung and kidney; third, frail elderly patients in the middle and advanced stage with vital qi failure; fourth, patients who have drug resistance and toxicity to western medicine treatment. Traditional Chinese medicine (TCM) is regarded as an alternative therapy, combined with a variety of treatment methods such as oral administration, acupuncture, hyperthermia, acupoint application and other comprehensive treatment to prolong survival and improve the quality of life.

#### **4.2. Combined targeted therapy**

With the introduction of precision medicine, targeted therapy targeting cell receptors, key genes and regulatory molecules has been gradually widely used. For example, therapeutic drugs targeting EGFR include gefitinib, and monoclonal antibodies against EGFR include cetuximab [8]. These drugs mainly have obvious advantages in prolonging the life cycle of patients, with mild side effects on the body, but the quality of life of patients is still reduced, so traditional Chinese medicine should be given to righting and eliminating pathogens to go out.

#### **4.3. Combination with chemotherapy and radiotherapy for synergism and attenuation**

Chemotherapy can kill tumor cells and control the disease, but at the same time, normal tissues are destroyed, often invading the digestive tract, blood, immune system, etc., seriously affecting the quality of life of patients. Professor Jia Yingjie believes that chemotherapy belongs to the category of "drug toxicity" in traditional Chinese medicine, the body's vital qi consumption injury causes damage to viscera and organ tissues. Spleen and stomach is the source of qi and blood biochemistry, the acquired basis, so it should regulate the spleen and stomach, reduce the toxicity of chemotherapy. The clinical application often based on Xiaoyan Decoction plus spleen and stomach drugs, or with spleen and stomach Chinese patent medicines; and reuse Astragalus, ginseng, Cordyceps sinensis to support vital qi, thus to reach "vital qi storage, evil can not be dried". Professor Jia also pointed out that using anti-inflammatory soup 7 days before chemotherapy has the best effect [8]. Compared with western medicine chemotherapy, traditional Chinese medicine treatment can improve the shortcomings of modern medicine, improve the efficacy of modern medicine, reduce tumor markers, and reduce leukotoxicity, improve gastrointestinal nausea and vomiting symptoms, to achieve tumor-bearing survival.

#### **5. Examples of medical records**

Li, female, 54 years old. The patient underwent radical resection of lung cancer in Tangdu Hospital due to right lung cancer in 2017. Postoperative pathology suggested moderately differentiated squamous cell carcinoma of the lung. The patient was postoperatively given GP chemotherapy for 6 cycles, and then regularly reexamined. In October 2018, the patient underwent chest ct test in the local hospital considering space-occupying lesions in the right lung, with obstructive pneumonia, considering postoperative changes of lung malignancies. The patient visited Qingyang People's Hospital, and reexamined chest ct soft tissue shadows in the left upper lobe of the lung with a little obstructive pneumonia. Comprehensive evaluation showed disease progression. The patient began to receive tp chemotherapy for 3 cycles in December 2018, and the last one was inferior to the end of March 2019. The patient stopped chemotherapy due to severe reactions. Today the patient visited our department for further treatment. On May 9, 2019, the patient was admitted to the outpatient department with "lung malignancies". Auxiliary examination after admission showed postoperative pathology revealed moderately differentiated squamous cell carcinoma of the lung. Cranial ct showed no significant abnormality. After thoracic ct right lung cancer surgery, soft tissue nodules in the right lower lobe combined with obstructive pneumonia and atelectasis in the

right lower lobe were considered as tumor recurrence. The patient was given diagnosis and treatment in combination with clinical practice. Upper abdominal ct showed localized nodular thickening of bilateral adrenal glands, metastasis was not excluded, and further examination was recommended. Zheng Jian: conscious chest tightness, shortness of breath, chronic expectoration, fatigue, abdominal distension, poor appetite, edema, loose stools, extremely poor spirit, pessimistic pain, pale tongue, thin fur, teeth marks on the tongue, thin pulse; disease differentiation: lung cancer stage III (T3N1MX); dialectical: qi deficiency, phlegm-dampness and blood stasis syndrome; symptomatic: cough, phlegm, chest tightness, shortness of breath, fatigue; treatment: invigorating the spleen and qi, strengthening the body and promoting lung and reducing phlegm, removing dampness and removing blood stasis and anti-cancer; prescription: (unit: g) Codonopsis 20, Atractylodes 10, Poria 10, Astragalus 30, Hedyotis 30, fried Coix 15, Taxus 6, Cat 15, Cortex 15, Vinegar 12, Cardamomum 15, Pinellia 15, fried Almond 10, Platycodon 12, Fritillaria 12, Scrophularia 15, Scrophularia 15, Radix 15, Radix Atractylodis 15, Radix Atractylodis 15, Citrus 9, Fructus 10, Radix Glycyrrhizae 10, 1 dose per day, decoction twice a day, oral decoction, morning and evening, rotene capsule treatment, combined with traditional Chinese medicine.

[Reexamination]: On April 25, 2020, compared with the patient came to our hospital for the first time, the mental condition of the patient was significantly improved, the complexion was improved, the patient was actively optimistic, the sleep was fair, and the urination and defecation were adjusted. Zheng Jian showed occasional cough, slight fatigue, pale red tongue, white fur, and thin and slippery pulse. Repeated chest CT showed no recurrence and the tumor shrank. Recipe: (Unit: g) Because the patient's expectoration symptoms were significantly relieved, the roasted winter flowers and roasted aster were subtracted on the basis of the original prescription, plus Wangjiangnan 30, Baiying 30, and August 15; and considering that the patient took the drug for a long time, it would cause certain damage to the digestive system, long time would injure the spleen and kidney plus qi and invigorate the spleen, digestion and stomach, kidney culture of the drug, Rhizoma Polygonati 15, Radix Rehmanniae 9, Cistanche deserticola 12, fried grain sprout 30, fried malt 30, ginger Amomum villosum 10, Muxiang 9, and 1 dose per day, with the same usage as above. Later, syndrome differentiation and treatment were performed, combined with disease and syndrome treatment, and no recurrence of lung cancer was observed during multiple follow-ups by the end of 2020, achieving the goal of tumor-bearing survival.

[Note]: In the process of diagnosis and treatment of this case, the diagnosis was already in the middle and late stage of lung cancer. Under the combined treatment of "disease, evidence and symptom" of the trinity, the disease was mainly in the lung, and the innate kidney, the innate spleen, and stomach were involved in the human body over time. Because of the middle and late stages, the primary deficiency was the root cause of the disease, which manifested as the deficiency of lung, spleen, and qi, and phlegm, dampness, blood circulation, elimination of blood stasis, detoxification, and anti-cancer, and the mechanism of the disease was complicated. In this treatment, patients' initial diagnosis and follow-up diagnosis should be observed dynamically, rounded the machine and live method, hit the principal contradiction, and adjust the proportion of the medicine to support the positive and anti-cancer medicine appropriately, remember that when supporting the positive, do not help the evil, and do not injure the positive when eliminating the evil to fight against cancer. Under the guidance of the overall concept of Chinese medicine, personalized treatment is given to the patient because the patient is initially depressed, pessimistic, and unstable in his emotional state of mind; therefore, as a doctor, he should pay attention to the patient's spiritual guidance and psychological guidance, so that the patient can overcome the pain caused by the disease positively and optimistically, as well as popularize the concept of survival with tumor to the patient so that the patient can have confidence in the Chinese medicine treatment of survival with tumor and have faith in the doctor and himself. If the patient can get out of bed, encourage the patient to go outside

to breathe fresh air, soothe his/her mood under the fresh air, exercise moderately, strengthen his/her physique, improve immunity, resist the disease, improve the quality of life, and survive with tumor.

## 6. Conclusion

Lung cancer patients, especially in the middle and advanced stages, should be treated with righting and eliminating pathogenic factors, anti-cancer detoxification and removing blood stasis, and round machine activation to achieve a tumor-bearing survival state that prolongs survival and improves quality of life. Tumor-bearing survival plays a unique advantage in traditional Chinese medicine and has a significant effect on the treatment of lung cancer patients. The treatment of traditional Chinese medicine should be applied to the whole process of lung cancer as soon as possible to make the combination of traditional Chinese and western medicine, complement each other, regulate and treat tumors, and contribute to the cause of human life and health.

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