

Study on Treatment of Lung Cancer Based on Syndrome Differentiation with Traditional Chinese Medicine

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Abstract: In recent years, the main clinical treatment of lung cancer is chemotherapy drugs, but the side effects caused by long-term use of these drugs will lead to the decline of human immunity. According to the domestic and foreign literature studies in recent years, traditional Chinese medicine can not only reduce the toxic and side effects caused by chemotherapeutic drugs, but also treat patients on the basis of diagnosis and treatment of Western medicine according to syndrome differentiation, to alleviate the patients with various symptoms, improve the patient's immunity, improve the quality of life of patients. The purpose of this study is to summarize the treatment of different types of lung cancer by traditional Chinese Medicine (TCM) in order to show that TCM has special therapeutic effect on different types of lung cancer, it provides accurate and reliable theoretical basis for clinical treatment of lung cancer and is worth popularizing.

Keywords: Lung Cancer, traditional Chinese Medicine, syndrome differentiation and treatment, a review

1. Research background

In recent years, with the change of people's living environment and life style and the aggravation of the aging degree, the respiratory system disease is the common and frequently-occurring disease which threatens the human health seriously. According to the World Health Organization statistics, in 2016, lung cancer ranked sixth in respiratory diseases, ranked first in cancer [1]. In the incidence of lung cancer, 40-70 years old is the high-risk population, and non-small-cell Lung Carcinoma is the main group. The pathogenesis of lung cancer is not clear yet, and there are no obvious clinical features, the best time for operation was lost, and only radiotherapy and chemotherapy could be used. Although radiotherapy and chemotherapy alone can kill cancer cells effectively, it is easy to produce certain degree of adverse reactions to normal cells of the body, causing greater pain to patients [2], and at the same time causing serious economic burden to patients and their families, so that patients with poor compliance. So finding an effective and cost-effective treatment has become a top priority. On the basis of syndrome differentiation and treatment, according to the patient's chief complaint, clinical symptoms and related auxiliary examination, the patients were divided into different syndrome types of TCM for targeted treatment. According to the clinical molecular biology, clinical laboratory and patients' symptoms, it is indicated that the treatment of traditional Chinese medicine, acupuncture and moxibustion on lung cancer can reduce the toxic and side effects of chemotherapy on human body, increase the sensitivity of radiotherapy, improve the patients' immune function and clinical symptoms, to improve the therapeutic effect and quality of life. At present, the clinical application of traditional Chinese medicine (TCM) and acupuncture in the treatment of lung cancer has been expanding. The author reviewed the relevant literatures in the past 5 years and summarized the clinical application of TCM in the treatment of lung cancer as follows.

2. Qi deficiency and phlegm dampness syndrome

Lung cancer patients are mostly 70-75-year-old old people, most of these patients have poor constitution, more serious underlying diseases [3], at the same time radiotherapy and chemotherapy and the toxic and side effects of targeted drugs, damage the body's positive Qi, spleen and

stomach function, Qi and blood biochemical lack of sources, at the same time, the function of spleen and stomach was damaged, the stomach lost harmony and fell, the stomach-qi was reversed and nausea and vomiting occurred. Abnormal transport of spleen and stomach, accumulation of water and dampness, sputum over time, patients often appear spleen deficiency phlegm-dampness syndrome of traditional Chinese medicine. So the main clinical manifestations of cough, expectoration, bloody sputum, nausea and vomiting, fatigue, lumbar and knee soreness. Chinese medicine to tonify Qi and blood, spleen and phlegm for the treatment, send prescription medication. Qi-invigorating and spleen-invigorating Chinese medicine to Astragalus, atractylodes, codonopsis Pinosula, ginseng-based, dry phlegm-type Chinese medicine to Tangerine Peel, Pinellia Ternate, Poria, Fritillaria, and other major. Most of the prescriptions were based on Sijunzi decoction, Liujunzi decoction, Erchen decoction and Sanziyangqin decoction, and then were modified according to the patients' clinical symptoms, which embodied the principle of treating the same disease with different treatments in TCM. According to pharmacological studies, the above-mentioned Chinese medicines all contain effective components of anti-tumor, which can directly or indirectly exert anti-tumor effects, and the Chinese medicines of invigorating spleen and Qi also contain active ingredients of enhancing hematopoietic function [4]. Experimental studies show that the water extract of Pinellia Ternata can stimulate the efferent activity of vagus nerve and has an antiemetic effect [5]. Therefore, Pinellia Ternata and pericarpium Citri reticulatae have the effect of anti-nausea and antiemetic, which is the basic drug for clinical treatment of vomiting. At the same time, the clinical examination showed that after a period of treatment, the white blood cell, hemoglobin and platelet of the patients treated with Yiqi Yangxue Lei Tang were increased, the bone marrow depression caused by chemotherapy was improved, and the patients were tired, the symptoms of malignant vomiting were significantly relieved.

3. Qi Yin deficiency syndrome

In traditional Chinese Medicine, lung cancer is classified as lung accumulation, Cardiac Qi and obstruction of lung. The Huangdi Neijing points out that "The lungs are delicate and dry". The lung is the main body of Qi, the main body of Qi, when the wind, heat, dryness and other external evil invasion, causing the human body deficiency of Qi, Lung Yin consumption, a long time to refine liquid into phlegm, burning blood for stasis, phlegm and blood stasis in the body, accumulation of mutual nucleation, formation of cancer, cancer, lung damage, and depletion of Qi and Yin, leading to deficiency of Human Body Qi and Yin Syndrome [6]. Long-term use of radiotherapy and chemotherapy side effects will aggravate the degree of injury to both Qi and Yin in the human body. It can be seen that cough has sputum or no sputum, mental fatigue, sweating and shortness of breath, dry mouth and fever, hot flushes in the afternoon, hot hands and feet, sometimes heart palpitations, red tongue, thin coating or fat tongue with tooth marks, thin pulse. The principle of clinical treatment is to replenish Qi, Nourish Yin, strengthen body resistance and fight cancer. More to winter, Ophiopogon japonicus, lily, Ginseng, jade bamboo and other nourishing yin run lung-based Chinese medicine. The traditional Chinese Medicine decoction is based on the decoction of Radix SALVIAE MILTIORRHIZAE and radix et rhizoma codonopsis, Rhizoma Atractylodis macrocephalae, Poria Cocos, etc. All the drugs used are mild, Qi and blood in harmony, Qi Yang Yin, health without leaving evil, a total contribution to the earth. Modern pharmacological studies have shown that ginsenosides and polysaccharides from Panax quinquefolium can not only inhibit the growth of tumor cells, but also improve the phagocytosis of mononuclear-macrophages and regulate the lymphocyte immune function [7]. Polysaccharides from OPHIOPOGON JAPONICUS can enhance the phagocytic function of reticuloendothelial cells and enhance the specific antigen immunity to tumor cells, thus inhibiting the development of tumors [8]. According to many clinical studies, chemotherapy combined with traditional Chinese medicine can effectively improve the short-term clinical total remission rate and reduce the rate of adverse reactions. The reason is that the chemotherapy drugs can clear the cancer cells in the body to a large extent, thus can obtain the good treatment effect, cooperate with the detoxification Chinese medicine can effectively clear the toxin in the patient's body, thus can effectively reduce the damage to the patient's body [9].

4. Yin deficiency and internal heat syndrome

With the prolongation of the course of disease, the aggravation of the deficiency of lung-yin and the long-term repeated use of radiochemotherapy drugs, the long-term metabolism of radiochemotherapy drugs in the kidney damages the kidney. According to the theory of the five elements, the lung metal, the kidney metal water, the lung and the kidney water, the lung and the kidney relations are called the

gold-water-born relations, also known as the lung and the kidney-born relations. Gold is the mother of water, the lung is the mother of the kidney, the Mother's disease and the Child. Furthermore, the Yin fluid between the lung and the kidney is also mutually financed. The Lung Yin is sufficient, the insemination is in the kidney, causes the Kidney Yin to be full, guarantees the kidney's function to be exuberant. Water can moisten gold, Kidney Yin is the basis of a body of Yin fluid, Kidney Yin sufficient, along the upper running in the lung, to ensure that the kidney-qi Qingning, Xuanjiang normal. "Medical couple record" points out: "The decline of lung-qi Wang, all hold enough kidney water, do not make the empty fire Alchemy, then the body of Qingbao Ning. Therefore, lung long-term disease will appear lung and Kidney Yin deficiency fire, its main clinical manifestations are sore throat, cough, chest tightness, irritability, dry nose and lips, breathing sounds, like wheezing, several symptoms of fatigue, dry mouth fever, afternoon hot flushes, hot hands and feet, sometimes palpitations, red tongue, coating thin, pulse number weakness. Traditional Chinese Medicine (TCM) is a combination of qi-enriching, yin-nourishing and detoxicating herbs, which mainly includes Radix Salviae, radix ophiopogonis, Radix scutellariae, Radix Hedyotis Diff, stir-fried Radix paeoniae Alba, liquorice, fructus trichosanthis, cortex Mori, Fritillaria Thunbergii, almonds and Pleurotus ostreatus. The traditional Chinese Medicine decoction is based on Yangyin Qingfei decoction and Baihe Gujin Decoction, and is added or subtracted according to the patients' clinical symptoms. Yangyin Qingfei decoction in the use of raw land, Scrophularia, ophiopogon Kidney Runfei, Jinshuixiangshengquan unceasing. Also with peppermint cool scattered knot, peony skin heat cool blood, Zhejiang Beiqing heat phlegm. All sides cool but not cold, a total of Yin, clear the lung, detoxification efficacy [10]. All sides cool but not cold, together play Yin, clear the lung, detoxification effect. Although there is no significant difference in the total effective rate between the two groups, Yangyin Qingfei decoction can effectively improve the immune function, improve the quality of life and reduce the toxic and side effects of patients with lung cancer without surgical indication.

5. Qi stagnation and blood stasis syndrome

Early lung cancer is mostly Qi deficiency, but with the development of the disease, it further consumes Qi and injures Yin, resulting in Qi and yin deficiency and both yin and yang deficiency, insufficient blood and Qi, leading to qi stagnation and blood stasis, phlegm coagulation and toxin accumulation. Tumors belong to the category of "symptoms and pains" in traditional Chinese medicine. There is a discussion of "Jie zhe San Zhi" in the Yellow Emperor's Internal Classic. Based on the relationship between tumor and blood stasis, qi stagnation and blood stasis are the main pathological mechanism of tumor formation and development, and appear in various pathological stages. Blood stasis is the pathological product of tumor formation [11]. Qi stagnation and blood stasis syndrome is the final development stage of lung cancer. Clinically, the main manifestations are poor cough, chest tightness, suffocation, pain with a definite place, or dark red sputum and blood, constipation, dry mouth, dark purple lips, dark red or purple tongue, ecchymosis, ecchymosis, etc., thin tongue coating, astringent pulse or thin string. In terms of treatment, it is mainly to promote blood circulation and remove blood stasis, supplemented by the principle of Supplementing Qi and nourishing yin. It is mainly composed of peach kernel, safflower, Rehmannia glutinosa, Codonopsis pilosula, peony bark, Ligusticum chuanxiong, Angelica sinensis, Fructus aurantii Immaturus, Salvia miltiorrhiza, liquorice and other traditional Chinese medicines to promote blood circulation and remove blood stasis. Traditional Chinese medicine decoction is based on Taohong Siwu Decoction for addition and subtraction treatment. Peach kernel, safflower and Salvia miltiorrhiza are powerful blood breaking drugs. Blood divides and expels blood stasis. Blood stasis can circulate blood. Chuanxiong Xinsan Wentong can not only promote blood circulation and remove blood stasis, but also promote qi and relieve pain. It is a medicine for Qi in blood. The ancients said that Chuanxiong can "go up the leader and down the sea of blood, Side open depression", so Chuanxiong is often used to treat chest and abdominal diseases. Rehmannia glutinosa and Angelica can replenish blood and activate blood circulation, Fructus aurantii can break blood and activate Qi, and Qi can activate blood circulation. Peony bark can clear heat, cool blood and activate blood circulation and remove blood stasis. On this basis, Baizhu, dangshen, roasted licorice and other Qi replenishing drugs are added. It is mainly used together to activate blood circulation and remove blood stasis, replenish qi and nourish yin. Modern pharmacology has proved that Taohong Siwu Decoction can significantly inhibit the metastasis of Lewis lung cancer, and can significantly down regulate vascular endothelial growth factor in tumor tissue (VEGF) expression, thereby inhibiting tumor angiogenesis [12]. Angelica sinensis and Rehmannia glutinosa can activate the body's immunity, increase the ratio of T lymphocytes and improve the low immune function of tumor cells; Ligustrazine in Ligusticum chuanxiong can inhibit the growth and metastasis of Lewis lung cancer transplanted tumor in mice [13]. The use of blood

activating and stasis removing drugs in traditional Chinese medicine can effectively improve the symptoms of cough, chest tightness, asthma and chest pain.

6. Conclusions

Traditional Chinese medicine plays a role in the treatment of lung cancer mainly from three aspects. (1) Reduce toxic and side effects: by adjusting the internal environment of the machine, reduce the toxic and side effects of platinum containing chemicals on the human body, and improve the sensitivity of patients to chemotherapy drugs, so as to improve the therapeutic effect. (2) Improve the immunity of the body: tonifying qi and nourishing blood decoction can increase leukocytes, hemoglobin and platelets by Tonifying Qi and blood, spleen and kidney, inhibit the growth of tumor cells and improve immunity. (3) Improve the clinical symptoms of patients: alleviate the clinical symptoms such as mental fatigue, malignant vomiting and pain caused by radiotherapy and chemotherapy. Improving and improving the quality of life of lung cancer patients is a problem that needs to be solved at present. Traditional Chinese medicine adjuvant therapy has unique advantages for lung cancer. At present, this treatment has become one of the important treatment methods for malignant tumors such as lung cancer [14]. It should be further studied and popularized.

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