

Preliminary study on the treatment of tumor by traditional Chinese medicine

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ABSTRACT: Tumors have become the focus of global attention. Traditional Chinese medicine has a distinct difference from modern medicine in the treatment of tumors, which is embodied in two aspects: "giving pathogenic factors a way out" and "regulating the tumor microenvironment". From three aspects: "slightly sweating", "keeping stool unobstructed" and "protecting and nourishing stomach qi", regulating the immune function of human body can improve the quality of life of patients and prolong the survival time of tumor bearing. Enhancing the tolerance of patients to radiotherapy and chemotherapy has a positive effect.

Keywords: TCM; Chinese medicine; tumor; thinking

Date of Submission: 10-09-2019

Date of acceptance: 27-09-2019

I. INTRODUCTION

At present, tumors are a serious threat to human life. According to the World Cancer Report 2018, the cumulative risk of cancer in the world before the age of 75 is 21.4%, and the risk of dying from cancer is as high as 17.7%. In Asia, the situation of cancer prevention and control is even more to be grim. Nearly half of new cancer cases and more than half of cancer deaths occurred in Asia in 2018 (Bray *et al.*, 2018). Traditional Chinese medicine has a history of thousands of years in China. Traditional Chinese medicine has unique treatment ideas for cancer, and its curative effect is positive. It plays an important role in the survival of tumors and the prevention and treatment of tumor recurrence and metastasis.

Treatment of tumors with traditional Chinese medicine is prominently reflected in the two aspects of "giving pathogenic factors a way out" and "regulating tumor microenvironment". Traditional Chinese medicine regards tumor as a kind of "cancer" (Haibo *et al.*, 2014). It is not a way to kill tumor cells, but to use the method of "slightly sweating" and "keeping stool unobstructed" gives cancer poison a way out, and evil goes to be safe. The growth of tumors is closely related to the microenvironment in which they are located. The "tumor" and "microenvironment" are like "seeds" and "soil". The progress of cancer is not only related to "seed", but also closely related to the "soil" of tumor survival (Kenny *et al.*, 2008). Chinese medicine treatment of tumors is to regulate the body's yin and yang qi and blood disorders, and restore the body's self-regulation ability. As the Jinkui Jade Sutra says, "if the five Zang organs are really unobstructed, people will be safe."

II. GIVE PATHOGENIC FACTOR A WAY OUT

The "Diaphoresis Method", "Emetic Therapy" and "Purgative Method" in the Eight Methods of TCM Treatment are common methods used by Chinese medicine to give pathogenic factors a way out. "Diaphoresis Method" refers to the method of sweating when the disease is evil in the Taiyang meridian and without sweat. The "Emetic Therapy" refers to the method in which the food stagnation is stagnated in the stomach and the vomiting is used. "Purgative Method" refers to the use of laxative methods when the disease is evil in Yangming and constipation. Zhang Zihé is one of the four eminent physicians in the Jin and Yuan Dynasties, especially pay attention to the purgation, open the door to expel the pathogenic factors, but not to close the door, and puts forward the idea that "eliminating old stagnation to make stomach and intestine clean, and eliminating packings to bring prosperity to ying qi and wei qi", which is of guiding significance for the treatment of tumors.

Traditional Chinese medicine thinks that the tumor develops to the later stage, all have the manifestation of systemic deficiency damage, but the Zang-fu yang qi is weak, will cause the qi blood body fluid to run powerless, thus further evolves into the qi stagnation, the phlegm coagulation and the blood stasis, thus leads to the tumor occurrence. "all parts of the body, where there is no yang is sick" (Ke, 2008). Medical understanding says: "all Yang deficiency, it is appropriate to make up for sweating;" All patients with yin deficiency should nourish yin and sweat (Chuan *et al.*, 2016). Therefore, in tumor treatment, "sweat method" is not only the

purpose of treatment but also the means of treatment. Sweating is not only about exorcising evil, but also arousing yang qi to relieve cold and clot, which is also known as "Kaixuan Fu". It is often said in ancient times that "promoting soup to stop boiling is not as good as pulling money from the bottom of the kettle" (Lin, 1985). In clinic, many cancer patients take painkillers, abdominal distension, halitosis, stool dryness, or even defecation, and often use the method of purging the viscera and purging the viscera. Such as Shengsheng Powder (Bombax mori, cicada slough, turmeric, rhubarb) go out (Hai & Xiaomin, 2005); almond, Magnolia officinalis, Poria cocos Xuan Sanjiao; Zhizhu pills (Fructus Aurantii, Radix Atractylodes macrocephala) to treat diet injury, restore spleen and stomach function; Jichuan decoction (*Angelica sinensis*, *Achyranthes bidentata*, *Cistanche deserticola*, *alisma orientalis*, *Gastrodia elata*, *Fructus Aurantii*) to treat constipation caused by intestinal dryness in the elderly, and so on. Emodin, a traditional Chinese medicine commonly used in the treatment of constipation, has been proved to have inhibitory effect on tumor invasion, migration, angiogenesis and other tumor metastasis (Yang Nian *et al.*, 2016).

III. REGULATE THE TUMOR MICROENVIRONMENT

Traditional Chinese medicine believes that the human body is a small universe, heart, liver, lung, kidney around the spleen is constantly moving round. Peng Ziyi said "Zhongqi such as axis, four dimensions such as wheel, axis transportation rotation, wheel stagnation axis stop" (Ziyi & Hongfei, 2007), here refers to the "spleen" in the five internal organs of traditional Chinese medicine "spleen" transformed gas, some scholars believe that

"spleen failure" is the root of cancer (Shaocai *et al.*, 2009), related to immunosuppression in the tumor

microenvironment caused by "spleen deficiency" (Qinrui, *et al.*, 2014). Therefore, traditional Chinese medicine to regulate the tumor microenvironment is mainly from the protecting and nourishing stomach qi, Li Dongyuan

of Jinyuan four families pointed out in the Theory of spleen and stomach. Yang Qi is also (Junjun *et al.*, 2017).

It is considered that stomach qi is very important and the key to the prognosis of human disease. Modern pharmacological research has found that there are many traditional Chinese medicines that have the effect of killing tumor cells, such as *Hedyotis diffusa*, *Brucea javanica*, *Lobelia*, *Sophora*, *Radix*, etc. (Lei & Peifeng, 2007). However, in clinical applications because of its certain gastrointestinal reaction, it is often used in combination with traditional Chinese medicine for invigorating spleen and invigorating qi. For tumor patients with emaciation, loss of appetite, nausea and vomiting, scholars put forward "six methods of regulating Qi, dissipating phlegm, eliminating food, nourishing yin," There are six methods of warming and tonifying qi (Ning & Hang, 2011). The common drug combinations are: *Atractylodes macrocephala* and *Poria*, orange peel and bamboo Ru, raw malt and chicken gold, Hawthorn and betel nut, sand participation in *Ophiopogon mongolica*, *Coptis chinensis* and *Evodia officinalis*, *Astragalus membranaceus*, etc. (Jianhua & Guizhi, 2010). These traditional Chinese medicine can promote the phagocytic function of reticular endothelial system, thus changing the immune state of the body, and by activating the Hypothalamic-pituitary-adrenal axis, Increase cyclic adenosine monophosphate in vivo, change tumor microenvironment, thus inhibit the growth of tumor cells (Bing *et al.*, 2008) (Yanhong & Yumei, 2007). In addition, spleen-invigorating herbs such as *Polyporus umbellatus* and Coix seed have also been proved to regulate the internal environment of tumor inflammation and inhibit tumor angiogenesis (Wei *et al.*, 2009) (Jian *et al.*, 2012).

IV. CONCLUSION

Paying attention to patients' diet, sweating and bowel movements of patients are the difference between traditional Chinese medicine treatment of tumors and modern medicine, which plays a positive role in improving the survival treatment of patients, prolonging the survival time of patients with tumors and enhancing the tolerance of patients to radiotherapy and chemotherapy. With the increasing communication between traditional Chinese medicine culture and the world, the unique advantages of traditional Chinese medicine in the treatment of tumor will become more and more obvious.

ACKNOWLEDGMENTS

This study was supported by the Natural Science Foundation of Zhejiang Province of China (No. LQ17C190002)

REFERENCES:

- [1]. Bing, H., Hongmei, A. & Keping, S. (2008) Anti-infective, anti-tumor and immunopharmacological studies of Buzhong Yiqi Decoction. *Zhongnan Pharmaceutical*, 6, 731-734.
- [2]. Bray, F., Ferlay, J., Soerjomataram, I., Siegel, R. L., Torre, L. A. & Jemal, A. (2018) Global cancer statistics 2018: GLOBOCAN estimates of incidence and mortality worldwide for 36 cancers in 185 countries. *CA Cancer J Clin*, 68, 394-424.
- [3]. Chuan, Z., Ran, Y., Fengming, Y. & Yiqi, Y. (2016) Theoretical analysis of treatment of tumors by micro-sweat method. *Chinese Journal of Basic Medicine in Traditional Chinese Medicine*, 1312-1313.
- [4]. Hai, X. & Xiaomin, W. (2005) The application of the theory of typhoid fever in the treatment of cancer. *Modern Clinical Medicine*, 12, 33-35.
- [5]. Haibo, C., Weixing, S., Yuhua, W. & Zhou Zhongying. (2014) Theoretical Study on Cancer Pathogenesis Based on Tumor Microenvironment. *Journal of Nanjing University of Traditional Chinese Medicine*, 30, 105-107.
- [6]. Jian, X., Wen, S., Jinqun, S., Xiaoli, W., Yipin, M. & Yi, L. (2012) Effects of Coix Seed Oil on Growth of Human Orthotopic Pancreatic Carcinoma BxPC-3 Cells and Expression of VEGF and bFGF. *Chinese Traditional and Herbal Drugs*, 43, 724-728.
- [7]. Jianhua, C. & Guizhi, S. (2010) Professor Sun Guizhi's Thought on Treating Cancer and Protecting Stomach. *Chinese Journal of Traditional Chinese Medicine*, 1808-1811.
- [8]. Junjun, A., Jialiang, Y. & Yaqin, Y. (2017) Discussion on the importance of taking care of stomach and stomach for patients with malignant tumors. *Guangming Zhong Yi*, 32, 2037-2038.
- [9]. Ke, L. (2008) On the treatment of tumors. In *Proceedings of the 2008 Beijing-The 2nd Fuyang Forum Proceedings*.
- [10]. Kenny, P. A., Lee, G. Y. & Bissell, M. J. (2008) Targeting the tumor microenvironment. *Front Biosci*, 2, 3468-3474.
- [11]. Lei, P. & Peifeng, C. (2007) Research progress on anti-tumor mechanism of Chinese herbal medicine for clearing away heat and detoxification. *Chinese Journal of Traditional Chinese Medicine*, 25, 569-571.
- [12]. Lin, H. (1985) Discussion on "The Way Out for Disease and Evil" *Shanghai Journal of Traditional Chinese Medicine*, 45-47.
- [13]. Ning, L. & Hang, S. (2011) Briefly on the significance of taking care of stomach and stomach in the treatment of advanced cancer. *Zhejiang Journal of Traditional Chinese Medicine*, 46, 452-452.
- [14]. Qinrui, H., Xiuqiong, F., Zhiling, Q. & Xuegang, S. (2014) The nature of spleen deficiency in tumor microenvironment. *Journal of Traditional Chinese Medicine*, 55, 292-294.
- [15]. Shaocai, G., Juanli, R. & Long, L. (2009) Cancer diagnosis and "spleen dysfunction" is the preliminary study of cancer incidence. *Shaanxi Traditional Chinese Medicine*, 30, 1354-1355.
- [16]. Wei, C., Runtian, W. & Guocheng, Z. (2009) In vitro study of down-regulation of tumor suppressor immunosuppression in Colon26 cells by *Polyporus umbellatus* L. *Journal of Immunology*, 650-654.
- [17]. Yang Nian, Longchao, X., Fengjun, C., Hongliang, L. & Wangxuanbin. (2016) Progress in the study of tumor metastasis and mechanism of emodin. *Cancer Pharmacy*, 6, 173-177.
- [18]. Yanhong, S. & Yumei, S. (2007) Research progress of sensitization of traditional Chinese medicine to tumor radiotherapy. *Shanghai Journal of Traditional Chinese Medicine*, 41, 82-84.
- [19]. Ziyi, P. & Hongfei, Z. (2007) *Ancient Chinese Medicine in Circular Movement*. Xueyuan Publishing House, Beijing.