

Research Progress of TCM Treatment of Chronic Bronchitis in Remission Stage

Hongjun Teng^{1, a*}, Hongying Sun^{2, b} and Yu Shi^{2, c}

¹Clinic, Tianjin Agricultural University, Tianjin, China, 300384

²Engineering and Technology College, Tianjin Agricultural University, Tianjin, China, 300384

^{a*}hongjun-teng@163.com, ^bsunny@tjau.edu.cn, ^csyych83@tjau.edu.cn

Keywords: Chronic bronchitis; Traditional Chinese medicine; Treatment method; Etiology and pathogenesis

Abstract. Chronic bronchitis is a common and frequent disease of respiratory system in the clinical; its main manifestation is the chronic non-specific inflammation of trachea, bronchial mucosa and surrounding tissue; its etiology is complex, associating with infection, allergies, genetic, immune dysfunction and so on. Its pathogenesis is deficiency in origin and excess in superficiality, the Ben is insidious phlegm and obstructing lung, the Biao is lack of vital qi, and weak of the lung, spleen and kidney. According to the etiology and pathogenesis of chronic bronchitis, clinicians summed up a variety of treatment methods of traditional Chinese medicine, emphasizing the need for the treatment of chronic bronchitis, summary and classification of internal and external treatment, and highlight the clinical effect of treatment. The treatment methods of traditional Chinese medicine can avoid the shortcomings of Western medicine treatment manifestation not root cause, as well as the long-term use of Western medicine anti-inflammatory drugs side effects.

Introduction

Chronic Bronchitis is a common and frequent disease of respiratory system due to infection or non-infectious factors, its main manifestation is the chronic non-specific inflammation of trachea, bronchial mucosa and surrounding tissue [1]. The main symptoms of Chronic Bronchitis are mainly cough, sputum, shortness of breath, wheezing and so on, the early symptoms are mild and occur in the winter and spring, the late symptoms due to exacerbation of inflammation can exist perennial and are hard to be cured, there is no obvious seasonal onset [2]. Ran Xia considered that chronic bronchitis is more common in the elderly over the age of 50, if not treated in time, will be concurred by emphysema and heart disease [3]. Western medicine treatment of chronic bronchitis is mainly given antibiotics, cough and asthma drugs, which can temporarily relieve symptoms, but the long-term using of antibiotics in patients prone to physical weakness, decreased immunity, seriously affecting the quality of life of patients. For this reason, Chinese medicine through the accumulation of clinical experience, to take measures to solve the problem of chronic bronchitis in remission, make human body yang-qi adequate enough, "yin is at peace and yang is compact can essence-spirit be normal", and "when there is sufficient health qi inside, the pathogenic qi have no way to invade the health body", reduce seizure frequency of chronic bronchitis, and also reduce or prevent the development of diseases.

Etiology and Pathogenesis

Chronic bronchitis being a common and frequent disease of respiratory system, belong the category of "cough", "gasping syndrome", "phlegm retention" of traditional Chinese medicine, currently the pathogenesis of it is not very clear. The external cause of it may be related to respiratory tract infection, cold, smoking, inhalation of irritant gas, the body allergies, climate change, air pollution and other external irritating factors; the internal cause of it is related to the reducing of respiratory defenses and immune function, and plant nerve dysfunction. The pathogenesis of it is

yang-qi deficiency and internal exuberance of phlegm-damp; phlegm retention affect the descending and dispersing pertains function of lung; because lung being the governor of qi and reservoir of phlegm, therefore, the symptoms of chronic bronchitis is cough, phlegm, asthma, etc., of which the sputum is critical; spleen is the source of phlegm, in the spleen is given priority to cough up phlegm; kidney is the root of the qi and the origin of phlegm, in the kidney is given priority to asthma. The pathogenesis is deficiency in origin and enrichment in symptom, the Biao is turbid phlegm obstructing lung, the Ben is qi deficiency of lung, spleen and kidney. Therefore, Chinese medicine treatment of this disease from the "reality spilled its mark, then fill the empty parent" to start, combined with the etiology and pathogenesis, starting from the three dirty of lungs, spleen and kidney, as the ancient books of "Medical Guan" says: "Not in the lungs, but in the spleen. Not specifically in the spleen, and return to the kidney. The spleen is the mother of the lung, and the kidney is the son of the lung, so the virtual complement the mother and the virtual complement their son". According to the etiology and pathogenesis of chronic bronchitis, in recent years, Chinese medicine treatment of oral administration, external treatment point application, catgut embedding, moxibustion and other treatment methods and results are summarized, the effect is satisfactory, worthy of clinicians to use and promote. Now, which are summarized as follows.

Treatment upon Syndrome Differentiation

Traditional Chinese Medicine Treatment. Wang Zhiqiong [4] divided 52 cases of chronic bronchitis patients into phlegm dampness in lungs, phlegm-heat stagnating in the lung, hepatic fire attacking lung, and deficiency of lung yin deficiency, to flavored cough soup (Clam shell 30g, Ke sub 15g, Platycodon 20g, Aster 15g, Sinapis alba 15g, Radix stemonae 20g, Tangerine peel 20g, Cynanchum 15g and Licorice 9g) as primary treatment, the patients of phlegm dampness in lungs add Mustard Seed 15g, Perilla 5g, Dried ginger 15g and Tangerine peel 40g; the patients of phlegm-heat stagnating in the lung add Cortex mori 20g, Houttuynia 40g, Scutellaria 20g, Gardenia 15g and Winter melon skin 20g; the patients of hepatic fire attacking lung add Indigo 15g, Sea clam shell 10g, Scutellaria 15g, Cortex mori 15g and Cortex lycii 15g; the patients of deficiency of lung yin deficiency add Coastal glehnia root 20g, Dwarf lilyturf 20g, Jade bamboo 30g and Radix trichosanthis 30g. Usage and dosage: every day to take a dose, and continuous treatment for two weeks. The control group takes compound bergenin tablets orally. The result of treatment efficiency of the treatment group was 94.2%, and 68.8% in the control group.

Luo Ming [5] the use of Maimendong Decoction (Ophiopogon 20g, Pinellia 12g, Podonopsis 12g, Licorice 8g, Rice 8g and Jujube 3) add and subtract treating 38 cases of chronic bronchitis in remission deficiency of lung yin deficiency, blood in phlegm plus Cogongrass rhizome; hot flashes plus Artemisia annua and Turtle shell; night sweats plus Raw oysters and Floating wheat; hand, foot and heart fever plus Rhizoma anemarrhenae and Cortex phellodendri; sore throat plus Figwort and Puffball; severe cough plus Aster and Stemonae. Usage and dosage: every day to take a dose, and continuous treatment for 20 days. The control group takes hydrochloric acid ammonia bromine oral liquid treatment. The result of treatment efficiency of the treatment group effective rate was 92.11%, and the control group was 69.44%.

Zhang Dongliang [6] using ChaiHu QingFei decoction (Radix bupleuri 9g, Radix peucedani 9g, Flea repair 9g, Dried tangerine peel 9g, Green husk 9g, Pinellia 9g, Bamboo shavings 9g, Licorice 9g, Red peony root 18g, Lobelia 18g, Buddha ear grass 18g, Jiang scissors grass 18g and Asters 18g) in the treatment of 50 patients with chronic bronchitis, the control group with western medicine treatment, the result of treatment efficiency of the treatment group was 96%, 82% in the control group.

Shen Zhongdeng [7] using Eliminating Phlegm and Strengthening the Spleen soup (Codonopsis 15g, Fried atractylodes 15g, Raw keel 15g, Raw oysters 15g, Ginger pinellia 12g, Dried tangerine 12g, White mustard seed 12g, White mulberry root-bark 12g, Grass shade son 10g, Almond 10g and Schisandra 10g) in the treatment of 80 patients with phlegm-damp phlegm wet aggregates lung type chronic bronchitis, asthma severe plus Ephedra; phlegm serious plus asarum; afraid cold back cold

plus Dried ginger; cough and shortness of breath plus Ginseng and Clam clams. The total effective rate was 96.25%.

Li Yunwu [8] using Yiqi Huatan recipe (Codonopsis 20g, Astragalus 20g, Atractylodes 15g, Poria cocos 15g, Salvia miltiorrhiza 15g, Earthworm 10g, Almonds 10g, Perilla 10g, Tangerine peel 8g and Campanulaceae 8g) in the treatment of 70 patients with chronic bronchitis, fever and afraid cold minus Codonopsis and plus Bupleurum 20g, phlegmy in throat plus Shegan 10g; phlegm yellow viscous plus Skullcap 10g and Tianzhu huang 10g. Continuous treatment for 2 months, the result of treatment efficiency of the treatment group was 91.4%, and 74.3% in control group.

Other Therapies of Traditional Chinese Medicine (Acupoint Application, Moxibustion, Acupoint Catgut Treatment). Clinical doctors of chronic bronchitis in the use of traditional Chinese medicine at the same time, external treatment also has some research. These methods are simple, economic safety, non-toxic side effects, the role of a long time, which are effective clinical treatments and patients are willing to accept.

Mao Jing, etc. [9] on the basis of using the lung tablets combined with acupoint application treated 120 cases of chronic bronchitis, the treatments are in three periods of greatest heat, and the acupoints are as follows: 1 group acupoints are Dazhu (double), Feishu (double), Jue Yin shu(double), Tiantu; 2 group acupoints are Feng Men (double), Xin Shu (double), Du Shu (double), Tan Zhong. In the beginning periods of greatest heat a group of points are took, in the middle periods of greatest heat a group of points are took, and in the end of periods of greatest heat two groups are took. Continuous treatment for 6 months, the results of the treatment group effective rate was 95%, and 83.33% in the control group.

Ma Xinjian, et al. [10] using acupoint application Dazhui and Tiantu combined with acupoint injection in the treatment of 44 patients with chronic bronchitis. Selecting Ripe attached sheets, Herba Epimedii, Morinda, Ephedra, Asarum, Kansui, Clove Evodia, Cinnamon and so on, according to the proportion of mixing, grinding powder, ginger juice to reconcile, made about 2cm x 2cm pill, mounted on the acupuncture point with musk Zhuifeng paste, and cooperated with Zusanli point injection. Continuous treatment for three summers, the total effective rate was 95.45%.

Guo Yuli [11] using Zhike Pingchuan Gao in the treatment of 469 patients with chronic bronchitis. Method: White mustard, Euphorbia Kansui, Datura flower, Asarum, Ginkgo and Ginkgo seed grinded in proportion, with ginger juice tune into pills, fixed with adhesive tape in bilateral Dingchuan, Feishu, Xinyu, Geshu. Beginning the treatment in three periods of greatest heat, continuous patch for 2 years, the results of the treatment group effective rate was 95%.

Wu Huijun, et al. [12] using Western medicine and Thunder Fire Moxibustion in the treatment of 50 patients with chronic bronchus. Methods: Moxibustion was performed on the points of Feishu, Tianshu, Tanzhong, Dazhui, Dingchuan, Shenshu and Pishu, beginning the treatment in three periods of greatest heat, one times every day, seven times for a period of treatment, rest three day, continuous three period of treatment. The results of the treatment group effective rate was 96.0%, control group was 84.0%.

Peng Zhihua, et al. [13] using Acupoint Catgut embedding with Tianjiu in the treatment of 200 patients with chronic bronchitis. Tianjiu election points: Dazhui, Dampness, Dingchuan, Feishu, Gaohuangshu, Shenshu, Large intestine Yu, Tiantu, Qihai, Guanyuan, Zusanli, Fenglong. Moxibust 5 times in three periods of greatest heat, moxibust 4 times in the third nine-day period after the winter solstice. Drugs: White mustard, Euphorbia kansui, Corydalis, Asarum and Grinding powder, with ginger juice tuning into plaster and sticking points, first Ginger Moxibustion points, and then tape fixed. 1 year for a period of treatment, treatment for 3 years. Acupoint Catgut is that the catgut embedding into acupuncture points, in the non-day period of Tianjiu, catgut embedding one time every month. The result of effective rate of the treatment group was 94%.

Wu Dabin [14] using Medicine Bath with Moving cupping therapy in the treatment of 90 patients with chronic bronchitis, the Medicated Bath decoction: Yupingfeng powder, Yam, Epimedium, Cinnamomum cassia presl and Cistanche; packaged bag boiling for half an hour, the juice into the tub for the drug bath. Usage and dosage: a bag of medication each time, 1 month for a course of treatment. Cupping mainly is in the back and along the Governor and Bladder meridian, until skin flushing and

mild congestion. Usage and dosage: one time every 10 days, 3 times as a course of treatment. The results of the treatment group effective rate was 95.56%, the control group was 80.00%.

Conclusion

Chronic bronchitis is a common disease of the respiratory system, the elderly are the majority of the disease, mostly in the winter and spring season, recurrent, persistent unhealed, seriously affecting the quality of life of patients. Clinicians based on the etiology and pathogenesis of the disease to treatment, avoiding the shortcomings of Western medicine treatment manifestation not root cause, as well as the long-term use of Western medicine anti-inflammatory drugs side effects. Based on the theory of treating disease according to its origin, and treatment both manifestation and root cause, the Chinese medicine methods of oral administration and external treatment, using anti-inflammatory, anti-infection, releasing lungs gas, resolving phlegm and relieving cough and asthma to treat the chronic bronchitis, can reach the function of supplementing qi and nourishing yin, invigorating spleen and replenishing qi, and reinforce spleen and kidney. The external treatment technique of TCM is safe and effective, operation simple, non-toxic side effects, with Chinese medicine can not only control the disease progression, but also fundamentally enhance the body's immune function and realize the function of looking into both its roots cause and symptoms, is a new means of treatment worthy of clinical popularization and application. But for the clinical treatment of common and frequently-occurring disease, the lack of mature treatment planning system, clinicians need to summarize and improve.

Acknowledgements

This work was financially supported by the Project of Tianjin Agricultural University Education and Teaching Reform Research (2016-A-04).

References

- [1] Z.Y. Lu: Internal Medicine (People's Health Publishing House, China 2008).
- [2] H.Z. Chen: Practical Internal Medicine (People's Health Publishing House, China 2005).
- [3] X. Ran: Clinical Rational Ddrug Use, Vol. 5 (2012) No.7C, p.73.
- [4] Z.Q. Wang: Inner Mongolia Traditional Chinese Medicine, (2011) No.23, p.19-20.
- [5] M. Luo: Guiding Journal of Traditional Chinese Medicine and Pharmacy, Vol. 19 (2013) No.11, p.107-108.
- [6] D.L. Zhang: Northern Pharmacy, Vol. 11 (2014) No.2, p.48-49.
- [7] Z.D. Shen: Northern Pharmacy, Vol. 11 (2014) No.7, p.43.
- [8] Y.W. Li: Clinical Journal of Chinese Medicine, Vol. 4 (2012) No.2, p.79-80.
- [9] J. Mao, H.F. Song: Chinese Archives of Traditional Chinese Medicine, Vol. 31 (2013) No.2, p.413-414.
- [10] X.J. Ma, C. Li: Journal of Clinical Acupuncture and Moxibustion, Vol. 29 (2013) No.4, p. 40-41.
- [11] Y.L. Guo: Hunan Journal of Traditional Chinese Medicine, Vol. 28 (2012) No.2, p.55-56.
- [12] H.J. Wu, S.H. Zhang: The Light of Traditional Chinese Medicine, Vol. 28 (2013) No.9, p. 1872-1873.
- [13] Z.H. Peng, X. Cui, L.X. Yang, et al: Guiding Journal of Traditional Chinese Medicine and Pharmacy, Vol. 19 (2013) No.1, p.72-73.
- [14] D.B. Wu: Hubei Journal of TCM FEB, Vol. 36 (2014) No.2, p.34-35.