

Discussion on the Theory of External Treatment of Traditional Chinese Medicine

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Abstract. By studying the germination, development, glorious period, current situation, thinking about the existing problems of traditional Chinese medicine theory, put forward the solution, let people better understand the theory of external medicine.

Introduction

Traditional Chinese medicine theory has a long history, is an important part of the cause of traditional Chinese medicine. The study of the theory of traditional Chinese medicine has a very important role in the development of traditional Chinese medicine, but the research on the theory of traditional Chinese medicine is becoming less and less. This article through the traditional Chinese medicine theory of budding, development, glorious period, the status quo and the existing problems of a brief introduction, put forward the corresponding countermeasures to facilitate the understanding of traditional Chinese medicine theory.

The Germination Period of the Theory of Traditional Chinese Medicine

To find the relevant records in the external treatment of the Warring States to the Qin and Han Dynasties ancient. Such as the earliest of the herbal books *Materia Medica* records cold, heat, warm and cool four characters (now refers to the cold, heat, warm, cool these four attributes). Four characters is based on the idea of yin and yang, cold and cool are yin, heat and warm are yang. *Compendium of Materia Medica* which recorded four characters laid the foundation for the theory of traditional Chinese medicine taste. The role of external governance what the earliest talk about is the earliest existing geography book *Shan Hai Jing*. The book what originally written by Xia Yu, Bo yi is from the Warring States period, it is called *Shan Jing* and *The Sea in the future*. This book is rich in external treatment thought, especially in disease prevention and health care. For instance, external medicine with prevention and health care have more than 30, the prevention of illness and health with external treatment with more than 30 times, the dosage more than 70 times. Its external treatment accounted for 1/3 of the proportion of the whole treatment. Therefore, external treatment plays an important role in prevention and health care. The *Classic of the Great Wilderness* external treatment thought can be found in the *Canon of Internal Medicine* and the pre Qin ancient books. External treatment thought has made great contributions to modern health care and is worth learning from us. *Silk book with Prescriptions of Fifty-two Diseases* also has a lot of records on the external rule. Carrying a variety of external treatment methods in the book. Such as hemostasis, medicine or ointment application method, ironing method, fumigation bath method. The external treatment

theory of the earliest medical ancient books Canon of Medicine (full name Huangdi's Canon of Medicine) is discussed. Su Wen Yin and Yang Ying Xiang Zhi Da Lun mentioned in the "cure will be in this", its "this" is to find the root cause of the disease and then the right medicine. Su Wen Zhi Zhen Yao Da Lun is stressed to grasp the pathogenesis and this is very important. External treatment thought of Canon of Medicine and Materia Medica emphasizes prevention and early treatment [1]. Treatise on Febrile and Miscellaneous Diseases which is written by Zhang Zhongjing in Eastern Han dynasty is the first monograph on dialectical treatment. The book describes the clinical application of external therapy, such as promoting defecation with honey suppository can cure constipation. In this period, the theoretical framework of Chinese medicine was initially formed, which laid the foundation for the basic theory and practical application of traditional Chinese medicine, and created a precedent for the composition and perfection of the future thought system.

Min Yi Bie Lu, A Handbook of Prescriptions for Emergencies, Zhou Hou Bei Ji Fang, Liu Juan Zi Gui Yi Fang and Mei Shi Ji Yan Fang have come out in Wei, Jin and Southern and Northern Dynasties. Among them, Liu Juan Zi Gui Yi Fang is Ling Shu Yong Ju articles of the theory of inheritance and development. The book emphasizes the ideas of dialectical governance, internal and external governance, because of sickness and dialectical administration for external treatment, according to the different stages of development of patients with disease. Such as using powder reduces swelling in the early stages of the disease and pus should be broken to discharge after the pus (modern still use). This book also details how different parts of the method should be adopted [2]. Mei Shi Ji Yan Fang mentioned in the theory of external treatment for internal disease. Broken evodia and wine are cooked together to treat Abdominal Syndrome. The Tang Dynasty was a flourishing period of Chinese medicine development, and the study of external treatment was developing rapidly. Thousand Golden Prescriptions written by physician Sun Simiao describes the application of external therapy in subjects, its principle, method, prescription, medicine to "image thinking". The image thinking system is manifested in Yin-Yang and five elements, Viscera meridian, Dialectical Treatment, Concept of Wholism, Herbal prescription and so on [3]. Su Wen Yin and Yang Ying Xiang Zhi Da Lun mentioned in "predominant yang generating heat, predominant yin causing cold". This is The Thousand Golden Prescriptions in excess heat and asthenia-cold of two dialectical, which is followed The Huangdi's Canon of Medicine in cold and heat of the dialectical system. The Thousand Golden Prescriptions Sthenia Hepatic Heat mentioned in "Left-handed shut pulse yin of real patients, the foot-jueyin meridians... is called sthenia hepatic heat". The dialectical of the meridians is followed by Classic of Pulse. The Thousand Golden Prescriptions pay attention to the whole thinking of viscera, such as the dialectics of the lung and colorectal [4]. The rapid development of Chinese medicine at the same time on the progress of traditional Chinese medicine also played a role in promoting in Song, Jin, Yuan Period. The number of treated drugs increased markedly, such as Classified Materia Medica. Kaibao Bencao increased the effect of some medicinal herbs. For example, it is described for the first time external treatment efficacy. Ri Hua Zi Ben Cao is an important reference book for external treatment. The book on the drug processing method, the drug fear of evil emotions, drug taste, and drug efficacy made a detailed discussion. The external treatment of traditional Chinese medicine further development in Ming dynasty. Its representative is Compendium of Materia Medica which is recorded in the book a lot of medicine therapy, external

treatment included a large number of single prescriptions, and there are more than ten kinds of external therapies involving clinical departments. Ben Cao Jing Shu, Collected Works of Materia Medica and Ben Cao Zheng have an external mechanism of elaboration. The biggest feature in Collected Works of Materia Medica is the clinical drug is particularly rich; this book has a detailed discussion in the use of traditional Chinese medicine theory of drug application points, the mechanism of action, precautions. When it is necessary, the main points of the dialectic of some drugs are detailed. The book also debate “the suspect is wrong” that the identification of drugs and efficacy dialectical and plays an important role in the development of the theory of external treatment of Chinese herbal medicine [5]. Supplement to the Compendium of Materia Medica on the external rule made a great contribution in Qing dynasty.

The Development Period of the Theory of External Treatment of Traditional Chinese Medicine

The glorious period of Chinese medicine external treatment theory is Qing dynasty, Ji Jiu Guang Sheng Ji and Rhymed Discourses on External Therapy sign of the external governance system from the beginning into mature, especially The Rhymed Discourses on External Therapy. Rhymed Discourses on External Therapy written by Wu Shangxian is formerly known as Wai Zhi Yi Shuo. This book systematically expounds the external treatment of the theoretical basis, dialectical treatment, drug characteristics, and mechanisms and so on. (1) External governance theory origin. People’s awareness of external treatment should be preceded by internal treatment; history has proved that the stone needle appears before decoction. Wu Shangxian proposed “internal disease outside the rule, the ancient law” on the basis of summing up the results of predecessors. In the theoretical basis of the elaboration of external treatment, a lot of them are borrowed from the view of Huangdi's Canon of Medicine. “On the take, take the outside to take, in order to have “is to borrow a sentence of Su Wen Wu Chang Zheng Da Lun. External treatment originated from Huangdi's Canon of Medicine. Treatment of diseases with acupuncture is the beginning of internal external treatment. Wu Shangxian believes that the “creamy disease” thought is rooted in the same period of medical expert Ye Gui. The theory of external treatment of Chinese medicine has been accumulated on the basis of continuous practice. (2) External treatment mechanism. Wu Shangxian, a medical expert in Qing dynasty, believed that both external treatment and internal treatment were based on the theory of traditional Chinese Medicine. According to the body of cold and heat and the different of asthenia and sthenia, reinforcing deficiency and reducing excess. The role of drugs restores the body of the various organs of qi xue and un-balanced Yin Yang to treat the disease. Wu’s internal and external treatment is the same reason theory. The meridian will be linked to various organs in the body and the body of Mao Kong, drugs is administered by meridians from the exterior to the interior. Internal and external treatment is the same reason theory, modern interpretation is transdermal absorption. There are five principles of dialectical treatment. Firstly, observe its causes. We must know the cause of the disease and analyze its cause, such as the six exogenous, internal causes and regional or dietary differences. Secondly, looking at its color. It is based on the appearance of the phenomenon to determine the nature of the disease. Thirdly, internal and external. It is frequently on the surface at the beginning of the disease and it will hurt the internal organs after a long time. Fourthly, forked rubbing. We should distinguish the nature of the disease and distinguish between yin and Yang. Yang is the Yang pathogen and Yin

is the Yin pathogen. In addition, special attention is given to the changes in the Yin and Yang nature of diseases, such as overuse dryness-heat or cold and cool. Fifthly, look at positions and meridians. Distinguishment the disease position can distinguish the disease attribution. The asthenia and sthenia of the disease can be distinguished according to the position of the disease. For example, upper warmer choked real pentad and middle-jiao is acerbity sluggish pentad, disease is easy to take advantage of attack, lower energizer is deficiency loss pentad [6]. (3)Drug characteristics. Rhymed Discourses on External Therapy recorded in the treatment of diseases with plaster. The book also summarizes the characteristics of the ointment. Firstly, plaster by the body pathways. Go through the network, open through, pull the disease out of the product cited. Secondly, the taste of the drug is strong. Wu said “herbs thick, the effect of strong .Drug flavor, and the effect of weak” . The book contains commonly used drugs of chuangwu, ginger, sheng fuzi, these are mostly toxic, irritating strong, spicy warm drugs. Thirdly, drug properties have relation with curative effect. Such as heat, attack is easy and cool, fill the next [7]. In summary, Rhymed Discourses on External Therapy has made an indelible contribution for external governance theory.

The Current Situation and Problems of TCM External Treatment Theory

With the development of the times and the continuous progress of the pharmaceutical industry, the external treatment of Chinese medicine has achieved great success in some aspects. (1) Clinical application. In recent years, a large number of articles about external treatment and clinical applications have been published in large numbers, these articles cover various subjects, such as skin, bone injury, health care, internal and external Gynecology and so on. Treatment of intractable dermatosis by external therapy [8].Treatment of chronic glomerulonephritis with medicinal bath [9].Treatment of Knee Osteoarthritis by External Treatment of Traditional Chinese Medicine[10]. Treatment of diabetic foot gangrene with external therapy [11].Treatment of Malignant Tumor by External Treatment of Traditional Chinese Medicine[12]. (2)Methods and techniques.①Transdermal absorbent. In order to solve the difficult problem of skin barrier, PE (transdermal absorption enhancer) is often added into the target preparation. PE can increase the skin permeability, and has non-toxic, irritating and other advantages, which is currently an important means of solving skin problems. ②Physical penetration enhancement method. This is iontophoresis and uses electric currents to promote penetration of drugs. Iontophoresis does not cause changes in the physiology of the skin. It is now used in the treatment of bone hyperplasia and other diseases. The difference between ultrasound and iontophoresis is that the penetration depth is different. Electroporation is the increase of permeability of cell delivery to lippi administration. Laser is to remove the horny layer of the skin surface, but it will not hurt the skin epidermis, promote skin absorption. Microneedle arrays are now in experimental phase with little clinical application. This method has the characteristics of high efficacy, less adverse reactions, painless and low safety[13]. (3) Theoretical aspect. Internationally, the theory or formula of Chinese herbal medicine has become “foreign herbal medicine” in the foreign population, and has occupied the market of all countries with a new look. Although the theory of external treatment of Chinese medicine has been spread all over the world, the present research on the theory of external treatment of Chinese herbal medicine is not optimistic.

There are problems in the theory of external treatment traditional Chinese medicine. The study of external mechanism is not sufficient. Rhymed Discourses on External Therapy in the phrase “External governance theory is theory of internal governance. The external medicine is the medicine of internal governance. The other is not right”. But from the point of view of some internal and external treatment is not exactly the same, such as there are obvious differences in the amount of absorption of the body, topical absorption less than oral administration, because there is no influence of a series of factors such as hepatic metabolism and drug interaction on the external use. In addition, there are differences in efficacy, the theory of traditional Chinese medicine is formed on the basis of internal medicine, and there are different changes from the inside out [14]. Modern medicine shows that external use of drugs can be absorbed through the skin and mucous membranes. Releases, penetration, absorption into the blood circulation are three important stages of percutaneous absorption. The drug passes through the stratum corneum cells of the skin, then passes through the intercellular space, or passes through the skin follicles first, and then is absorbed and utilized by the sebaceous glands. The molecular weight of the drug can be absorbed by the stratum corneum. When the molecular weight is large, it is absorbed mainly through the pores and sweat glands. The external use of Chinese herbal medicine is complicated and it is totally unconvincing to describe the mechanism of action only through transdermal absorption. Traditional Chinese medicine theory has used acupoint absorption and meridian conduction to explain the external use of traditional Chinese medicine, but it lacks modern theoretical basis. Topical medicine lacks the corresponding theory of traditional Chinese medicine, which is also a serious problem at present.

Prospect

Facing the above situation and the existing problems, we should further improve the theory of external treatment. Topical medicine is based on the theory of internal medicine, it is hard to convincing. After oral administration, it will be affected by many factors in the body. The oral medicine is directly referred to as an external medicine, and these factors are not taken into consideration, which will increase the insecurity of the medication. We need to pay more attention to external governance theory innovation. The development of external treatment of Chinese medicine is based on the theory of external governance, and only theoretical innovation can be carried out continuously. For thousands of years, people have applied the theories of previous generations, and have never questioned it. This is an important reason for the restriction of the development of the theory of external treatment of Chinese herbal medicine, and we must be brave enough to break through. We should step up the updating of textbooks for external governance and cultivate a large number of external governance talents. The study of modern people's external governance theory will be added to teaching books to cultivate more external governance talents. Only the talented person unceasingly, the Chinese medicine external treatment can endure for a long time. We need to strengthen scientific and technological innovation, and closely integrate modern science and technology and increase basic work. We should keep pace with the times, apply modern science and technology to external governance, strengthen the study of effective ingredients, target and mechanism of external governance, and provide a large number of theoretical basis for external treatment. Our purpose is to improve and perfect the theory of external treatment. While inheriting the theory of external governance, we

should constantly innovate, so that external use of drugs have more theoretical basis for people to use more safe ,long-term, cheap.

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References

[1]Zheng Huiling, Zhang Yongchen. Analysis of external governance thought in Rhymed Discourses on External Therapy [J]. Journal of Clinical Acupuncture and Moxibustion, 2017, (05):78-80.

[2]Yang Enpin. A brief analysis of the academic contributions of Liu Juan-zi's Gui-Yi-fang [J]. Journal of Yunnan College of Traditional Chinese Medicine, 2013,(03):79-81.

[3]Wang Xinyan. A study on the image thinking of Thousand Golden Prescriptions[D]. Shandong Traditional Chinese Medicine University,2015.

[4]Qu Liang, Zhang Yang. Analysis of viscera differentiation in Qianjin prescription[J]. Liaoning Journal of Traditional Chinese Medicine,2015,(11):2110-2111.

[5]Wu Changguo. A study on The Collected Works of Materia Medica in Ming Dynasty[J]. Journal of Traditional Chinese Medicinal Literature,2011,(05):5-7.

[6]Wang Yanyan. Analysis of external treatment of internal diseases in Rhymed Discourses on External Therapy [J]. Journal of Changchun University of Traditional Chinese Medicine, 2010,(02):167-168.

[7]Lu Shuqiong. Thought of syndrome differentiation and treatment and brief analysis of prescriptions in Rhymed Discourses on External Therapy [J]. Liaoning Journal of Traditional Chinese Medicine, 2010,(S1):9-10.

[8]Zhang Chenghui, Liu Zhaoxia, Liu Hongxia. Liu Hongxia's experience in the treatment of intractable skin diseases by external therapy [J]. Chinese Journal of Traditional Chinese Medicine, 2017,(02):622-624.

[9]Yuan Yanling, Li Wei. Progress of external therapy of Chinese medicine for chronic glomerulonephritis[J]. World Journal of Integrative Medicine, 2017,(05):738-740.

[10]Zhang Shijiao, Guan Xuefeng. The latest progress of external treatment of Chinese medicine for knee osteoarthritis [J]. Chinese Journal of Osteoporosis, 2016,(07):907-911.

[11]Zhu Zhaojun, Xu Qiang, Zhang Zhaohui, Ma Jing, Li Pinchuan, Tian Ying, Peng Juan. Application of external application of syndrome differentiation and herbal medicine in the treatment of diabetic foot gangrene [J]. Chinese Journal of Traditional Chinese Medicine, 2014, (02):494-496.

[12]Xiao Li, He Xiulan, Hu Kaiwen, Lin Zhiqiang. The position and function of external treatment of Chinese medicine in clinical treatment of malignant tumor [J]. Chinese Journal of Basic Medicine of Chinese Medicine, 2011, (02):198+200.

[13]Ding Xiaobo. Present situation and Prospect of external treatment of Chinese Medicine [A]. China Association of Traditional Chinese Medicine. Proceedings of the 2009 International Conference on traditional medicine and the National Forum on Chinese medicine treatment[C].China Association of Traditional Chinese Medicine,2009:2.

[14]Miao Mingsan, Guo Yan, Zhang Yu, Cui Ying. Traditional Chinese medicine theory, external efficacy and problems[J]. Journal of Henan University of Chinese Medicine, 2004, (06):13-15.