

Treatment of Geriatric Debilitating Syndrome based on the Theory of Deficiency Fire and Latent Fire

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Abstract: Geriatric infirmity is a non-specific state of the elderly due to the decrease of physiological reserve function, the increase of vulnerability to external factors, the decrease of anti-stress ability and the decrease of the body's ability to maintain its own homeostasis. Traditional Chinese Medicine (TCM) attributes it to the category of "deficiency labor". The basic pathogenesis of kidney deficiency, the principle of treatment is to replenish the kidney and fill in the essence for treatment, the Ming Dynasty physician Wang Qishi, "Lixu Yuanjian" that the pathogenesis of deficiency labor is closely related to the "deficiency fire". Deficiency fire belongs to yang deficiency lesions, and latent fire belongs to yin deficiency lesions. This paper examines this theory in order to provide more ideas for the clinical treatment of geriatric debility syndrome.

Keywords: Geriatric infirmity, Deficiency fire and latent fire, Deficiency labor.

1. Introduction

The problem of aging is becoming more and more serious in our country, and senile weakness is also an important reason for the increased incidence of a variety of diseases. The debilitating syndromes of old age refer specifically to the decline of the body's functions in the elderly as a result of a variety of internal and external factors. This is manifested in reduced metabolic function of the body, endocrine dysfunction, reduced stress resistance, atrophy and reduction of muscle mass, reduced ability of the body to maintain its own homeostasis, and increased organ vulnerability. This in turn can lead to a range of related diseases as well as complications.

1.1 Recognition of the Etiology of the Debilitating Syndromes of Old Age

The Yellow Emperor's Classic of Internal Medicine was the first to put forward the theory of infirmity, emphasizing that whether or not the infirmity lies in the fullness and weakness of the kidney qi, and that it believes that the "deficiency of the kidneys" is the root of the infirmity in old age [1]. Wang, Wenhui [2] et al. When discussing the debilitating syndromes of old age using TCM theories again, the etiology is categorized into three aspects: congenital causes, qi and fluid deficiencies, yin and yang imbalances, mixed real and virtual, and dynamic changes. It is believed that the key to identifying senile infirmity lies in "the deficiency of one or more organs, qi, fluids, yin and yang, and whether or not there is a combination of phlegm, blood stasis, dampness and other real evils, and whether or not there is more or less deficiency" "The name of the disease of deficiency labor was first introduced in the sixth book of "The Essentials of the Golden Chamber - Pulse Evidence and Treatment of Blood Paralysis and Deficiency Labor Disease", It classifies deficiency labor into three categories: yang deficiency, yin deficiency, and yin and yang deficiency, and points out that warming the spleen and kidney is the key to the treatment of debility, and advocates

the point of treatment that replenishes the deficiency without forgetting to treat the reality. Meng Yi [3] and others believe that the disease of deficiency labor is a general term for a variety of chronic debilitating diseases that are characterized by the pathogenesis of the internal organs, qi, blood, yin and yang deficiency, and prolonged deficiency that does not revert to labor. In the "Lixu Yuanjian", there are three theories on the understanding of the mechanism of the disease of deficiency labor: "the heart and kidney do not communicate with each other" "the heart and kidney do not communicate with the general theory of the labor couch", and "deficiency fire and latent fire". "Lixu Yuanjian", in his discussion of deficiency labor, believes that there are six causes of deficiency labor, which can be summarized into three categories, the first of which is congenital causes; the second includes causes of irrationality, causes of exogenous sensations, and causes of medicine. The third category is the causes of self-regulation, including acquired causes and the causes of circumstances [4]. In the book, it is believed that emotions and moods play an important role in causing diseases, and are important factors in causing deficiency and fatigue. Mari [5] and others concluded that debilitating syndromes are closely related to inflammation, endothelial dysfunction, and hormonal changes in the body.

1.2 Clinical Manifestations as Well as Characteristics of the Debilitating Syndromes of Old Age

Frailty in old age is characterized by high morbidity, complex etiology, as well as difficulty in treatment. According to Jiang Shan et al [6] geriatric debility syndrome and sarcopenia are the main health problems faced by the elderly population, with similar manifestations but with different characteristics, and their attention in the field of geriatrics is increasing. Related studies have shown that frailty is a risk factor for heart failure (HF) events in the elderly [7]. Defined as unconscious loss of body mass, fatigue, slowness of movement, loss of grip strength, and low physical activity, debility results from the accumulation of multifaceted health deficits rather than from

a single factor [8]. Current research suggests that the correlation between frailty and aging is directly proportional, and sarcopenia is a major component of the frailty syndrome, manifesting itself as a loss of muscle strength, accompanied by a decrease in muscle number, a decline in muscle function, and a corresponding increase in the risk of balance disorders, falls, and falling out of bed with the progression of the disease. Wan Ying [9] et al. concluded that risk factors for debility include age, gender, cognitive dysfunction, nutritional status, co-morbidities and medications, mental health status, and cytokines and inflammatory factors are closely related.

1.3 Geriatric Frailty Screening and Assessment Tools

The assessment of frailty is an important part of CGA, and common frailty assessment scales include the Fried Frailty Scale, FRAIL, CFS Scale, FI Scale, EFS, and MPI Scale. The Fried frailty phenotype, a physiologic performance-based assessment, was the first widely used frailty assessment method and is also known as the Cardiovascular Health Study (CHS) index [10]. For the FI scale, this phenotype is a comprehensive assessment, with the drawback that the assessment procedure is too complicated [11]. The EFS is more comprehensive than other scales in assessing the physical, cognitive, and urinary incontinence domains in older adults. The MPI scale has been applied to older adults with different clinical conditions, grouped according to the risk of death and other factors (hospitalization, social support and home care), and usually provides a more accurate prognostic indicator for clinical management [12]. The assessment of relevant scales can enhance our prediction of disease risk including the identification of high-risk groups and the prediction of the occurrence of adverse events. It also facilitates the clinical development of individualized plans for patients or the assessment of efficacy, and for nursing care, the assessment of scales can also be used to determine the level of care for patients or the prevention of complications, among other things.

2. Latent Fire and Ambient Fire Theory Traceability

The theory of deficiency fire and Latent fire comes from the Ming Dynasty physician Wang Qishi's "Lixu Yuanjian", which is a monograph on the treatment of deficiency labor in traditional Chinese medicine. The book's rationale, method, prescription and medicine are all available, the text is easy to understand, and the article is focused, and it has formed a system of its own in its elaboration of the pathogenesis of deficiency labor, the principles of treatment, and the related prevention and treatment, and it has had a profound impact on the formation of the doctrine of deficiency loss in traditional Chinese medicine in the later generations. He creatively put forward the three theories of "incompatibility between the heart and kidneys", "incompatibility between the heart and kidneys and the general theory of labor and coughing", and "deficiency fire and latent fire". They all start with the word "fire". It is believed that the pathogenesis of deficiency labor is all closely related to fire, either as deficiency fire or latent fire. Deficiency fire has been called yin fire, floating fire, phase fire of detachment, fire of thunder dragon, etc. It has been emphasized by the majority of medical practitioners and has been understood in various ways. It has been emphasized by

many medical doctors and has been understood in many ways, for example, Li Dongtan regarded the phase fire of the departure position as "the thief of vital energy" [13]. The theory defines the latent fire as the fire that moves in the qi but not in the form, i.e., the false yang that floats outside, belonging to the yang-deficiency lesions, which are always due to the weakening of the Shaohuo fire, the deficiency of the yuan-yang, and the fire that does not return to its original source. Deficiency fire is clinically common in what modern medicine refers to as functional hypothermia, blood disorders, connective tissue disorders, endocrine disorders, advanced tumors, post-tumor radiotherapy and chemotherapy, or other chronic infectious diseases. Common symptoms include low-grade fever, night sweating, heartburn, dizziness and tinnitus. When Deficiency Fire is inflamed, it may manifest as facial redness, dizziness and fainting. Treatment of deficiency fire should focus on nourishing yin and lowering fire, avoiding blindly cathartic fire, which may damage yin essence and vital energy.

The theory of ambient evil was first recorded in the "Formulas for Fifty-two Diseases", derived from "Yellow Emperor's Classic of Internal Medicine", which states that "the evil stays in the body but does not develop yet", referring to the evil that is hidden in the body and does not have an immediate onset of illness [14]. Later, Wang Qishi and other medical practitioners believe that the latent fire refers to the first move in the gas, long and gradually in the form of fire, i.e., Yang hyperactivity, belonging to the yin deficiency lesions, mostly due to the yin deficiency fire, fire and wind caused by the abundance of wind. Characterized by an exceptionally long and slow progression of the disease, it is difficult to clear quickly with purgatives. It is usually caused by a deficiency of yin qi in the body and a relative hyperactivity of yang qi, and is associated with factors such as advanced age, over-exertion, and depletion from prolonged illness in the elderly. When latent fire is inflamed, it may be manifested as redness of the face, irritability and thirst. Common symptoms of latent fire include coughing up blood, vomiting blood, bone vapor, and heat in the hands, feet, and heart. latent fire When the upper inflammation, can be manifested as face red, irritability, thirst, etc.. The fire should be nourished by nourishing Yin and clearing away heat, avoiding blindly tonifying the fire, so as not to aggravate the condition.

In short, the deficiency fire and latent fire are interrelated and cause and effect each other. Yin deficiency in the body for a long time, which in turn leads to yang deficiency, yin loss and yang, resulting in yin and yang deficiency.

3. Treatment of Debilitating Syndromes in the Elderly based on the Theory of Deficiency Fire and Latent Fire

3.1 Focus on the Lungs, Spleen and Kidneys

The main reason for the weakness of the elderly for the deficiency of kidney essence, or long-term illness, deficiency of qi, blood, yin and yang, dysfunction of the internal organs, the clinical performance of the internal organs disorders, muscle and sinew weakness. Li Dongtan regarded the phase fire of Li position as "the thief of vital energy" and called it "yin fire". The representative formula of the method of

removing great heat by means of sweetness and warmth, namely, tonifying the middle and benefiting the vital energy, was slightly added with Huangbai to cathartically clear the fire. Zhu Danxi developed the theory of “yin is always insufficient and yang is always in excess” on the former theory. Jin Dynasty physician Liu Wansu believed that “all six qi are transformed from fire”, Wang Qishi summarized the method of his predecessors and created an inthree fundamentals, two-unit system for treating deficiency. “Lixu Yuanjian”: ‘There are three bases for treating deficiency, the lungs, spleen and kidneys’. It also points out that “the lungs are the heaven of the five organs, the spleen is the mother of all bones, and the kidneys are the root of life”, which points out the important role of the lungs, the spleen and the kidneys in the body’s essence and microtransportation [15]. The two-unit refers to the unity of the lungs and the spleen. Such as “Lixu Yuanjian” in the cloud: “Lung for the five organs of the day, the Division of the order of the festival..... Therefore, food and drink, water and cereal essence, evaporation from the spleen gas after all from the lungs as the main..... travel around the body.” [16]. If the spleen is not healthy, it will be unfavorable to transport, lift and lower not work, the essence of stagnation, the viscera are not moistened, the formation of deficiency in the long run [17]. Kidney duty failure, can not hide the essence of blood, visceral yin and yang imbalance, the shape of the flesh and blood disproportionate so into the deficiency of labor [18]. He believed that “to tonify the kidney water, it is better to tonify the lung to nourish its source, and to tonify the vital fire, it is better to tonify the spleen to build it up.” Therefore, it was considered especially important to protect the essence of the lungs in the treatment, and in the theory of “Yin deficiency is unified in the lungs”, it was suggested that: For those who do not see bone evaporation, laborious cough or vomiting of blood, it is advisable to clear gold and protect the lungs. For those who have bone vapor, cough with exertion, or vomiting blood, it is urgently recommended to clear gold and protect the lungs. Those who have been suffering from bone vapor, coughing with labor, or vomiting blood must not forget to protect the lungs throughout their lives. This shows the importance of Baofeng. For dry cough, dry and itchy throat, mouth and lips, Qing Jin Gan Jie Tang is recommended. If the disease comes from lust, use Qiong Yugao. For labor-heat and bone-steam, use the Qingre Yangrong Tang. In advanced stages of the disease, Chinese herbal medicine can be used in the form of Baibu Qing Jin Tang. Based on the theory of “The lungs and large intestine are interrelated”, Tian Mengxian [19] and others believed that the deficiency of positive qi and the loss of lung pronouncement and descending were the core pathomechanisms of cancer-related fatigue in colorectal cancer. It also suggested that the method of tonifying lung qi should be used throughout the treatment of cancer-caused fatigue.

When the debilitating symptoms are mainly due to insufficiency of Kidney-Yang, more warm and moist agents can be used to tonify the Kidneys, in order to collect its floating over and draw it back to the Vital Gate. In addition to the kidneys, Mr. Qishi believes that danpi, lycii cortex, and rehmannia root are important medicines for the kidney meridian, and there is no harm to the spleen and stomach due to too much cold, goji berry, anemarrhena asphodeloides, golden cypress and more damage to the middle jiao spleen and

stomach, and therefore should be used with caution. For patients with spleen and stomach qi deficiency and yin fire evidence, Li Dongyuan believed that sweet and warm agents should be used to glorify and nourish the spleen and earth in the middle jiao [20]. Wang Qishi used astragalus, atractylodes, Chinese yam, ginseng and poria to tonify the spleen and enhance qi. He believed that huangbai and anemarrhena asphodeloides would easily cause damage to the functions of the spleen and stomach, so he used these two herbs less often. Zhang Liya [21] et al. were divided into two groups of 72 people, the observation group was treated with flavored Dioscorea formula, and the control group was treated with conventional means of drug therapy, which yielded a significant decrease in the Fried debilitation scale scores, Chinese medicine evidence points compared with the pre-treatment, P-value of the two groups of patients. Wang Zhiqiao [22] for thyroid cancer after surgery in the TSH suppression treatment common panic, irritability, insomnia, fatigue, bone pain and many other symptoms, and “Lixu Yuanjian” said that the pathological characteristics of the first to move in the qi, and for a long time and gradually attached to the form”, the treatment can be to nourish the heart and blood, strengthen the liver and spleen, regulate yin and yang, regulate the liver and body, and other treatments. In a clinical study, Ning Bopiao [23] and others found that Jiawei tonifying and benefiting qi soup could effectively improve the symptoms of cancer-caused fatigue in non-small cell lung cancer patients with weak spleen qi after surgery to improve their quality of life, and also promote the recovery of patients’ blood counts and liver function.

3.2 Combination of Regulating and Supplementing, Avoiding Harsh Supplementation and Indiscriminate Attack

For patients with related clinical manifestations, such as prolonged cough, hemoptysis, mouth sores, and recurrent low-grade fever, Wang Qishi advocates sweet-cold moistening and dryness, warming and tonifying the middle jiao, and avoiding nourishment and bitter-cold, which is in line with the strategy of combining tonicity and not attacking indiscriminately. Fang Zihao [24], according to Wang Qishi’s discussion, believes that when clearing the lung, do not overuse cold and nourishing products, so as to avoid damage to the spleen yang, transport failure; spleen should not be overuse of sweet, warm and dry products, so as to avoid exhaustion of lung qi and lung yin.

3.3 Combination of Treatment and Maintenance, Prevention is More Important Than Cure

3.3.1 Emphasize Emotions and Regulate Well

In terms of treating the disease before it starts, Qishi proposed “treating the disease before it starts”, Focusing on the overall relationship among the five organs, emotional disorders often have a leading and triggering role in the development of deficiency labor. In the book, it says, “Most of them are caused by the stagnation of ambition, worrying when things happen, or anger that hurts the liver, or sadness that has no place to be vented.” For example, laboring to grieve the heart, depression and anger hurt the liver, melancholy hurt the lungs, anxiety hurt the spleen, and gradually lead to an imbalance of

yin and yang in the internal organs, dysfunction, and so on. Therefore, we need to understand the patient's thoughts and the cause of the disease, and provide early treatment to avoid the occurrence of related disorders. Especially for the elderly who live alone, we need to guide the patient and focus on the patient's feelings.

3.3.2 Dietary taboos and moderation of work and rest

The human body relies on water and grains for its vitality, so regulating diet is crucial for deficiency labor. Generally rich in nutrients, easy to digest, do not hurt the spleen and stomach as the principle. Therefore, we should avoid spicy and thick flavors, cold and greasy, and recommend yam, lotus seeds and other flat tonic products to avoid exacerbating the deficiency due to inappropriate diet. Labor and leisure are the unity of opposites of the physiological needs of the human body, moderate labor helps to promote the operation of qi and blood, enhance physical fitness, improve immunity. While proper rest can eliminate fatigue, restore physical strength and vitality, thus maintaining physical and mental health and maintaining a regular lifestyle. Traditional Chinese Medicine (TCM) feats such as Tai Chi and Ba Duan Jin have been shown to increase lower extremity muscle strength, improve balance, and enhance motor function and quality of life for seniors Chronic overwork or over-comfort can have a negative impact on physical health. In particular, maintaining regular low-intensity physical activity in patients with coronary artery disease reduces the risk of debilitation, as does engaging in physical activity [25]. So combining work and rest helps balance yin and yang and promotes physical and mental health.

4. Summary

Based on the theory of "deficiency fire and latent fire", the treatment of senile infirmity can effectively improve the symptoms of senile infirmity patients by supporting yang and replenishing deficiency, harmonizing the spleen and stomach, and nourishing yin and lowering fire. The theory of deficiency fire latent fire focuses more on regulating yin and yang by targeting the specific etiology of yin deficiency, the decline of lesser fire, and the deficiency of yuan-yang. This paper discusses its theory specifically in anticipation that the theory provides an important theoretical basis for TCM in the diagnosis and treatment of geriatric debilitating syndromes.

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