

Discussing on the Four Seasons of Liver Nourishment Based on Chinese Medicine Theory

Sha He¹, Jianmei Hao^{2,*}

¹Shaanxi University of Chinese Medicine, Xianyang 712046, Shaanxi, China

²Xi'an Hospital of Traditional Chinese Medicine Affiliated to Shaanxi University of Chinese Medicine,

Xi'an 710021, Shaanxi, China

*Correspondence Author

Abstract: *According to Chinese medicine theory, conforming to nature is the basic principle of health care, and “four seasons to nourish the liver” is one of the contents. This paper will start from Chinese medicine theory, combine the relationship between four seasons of climate change and the function of the five organs of the human body to explore the importance of the four seasons to nourish the liver and its specific methods, and analyze the scientific connotation of its modern lifestyle, to provide theoretical basis and practical guidance for the Chinese medicine. This paper will discuss the importance of the four seasons and its specific methods, and analyze its scientific connotation with the modern lifestyle, so as to provide theoretical basis and practical guidance for Chinese medicine.*

Keywords: Chinese medicine, Four seasons, Liver nourishment, Chinese medicine, Health care.

1. Introduction

Traditional Chinese Medicine (TCM) is a discipline based on the theory of TCM, which systematically researches the theories and methods of traditional Chinese medicine to nourish the mind and body, enhance physical fitness, prevent diseases, and prolong life. Its core lies in harmonizing yin and yang, adapting to nature, and realizing the goal of “treating the disease before it occurs” through multi-dimensional regimen of diet, living, exercise, and emotions. Nutrition, also known as regimen, Dao Sheng, etc. [1], maintenance of the body. Chinese medicine believes that people endowed with heaven and earth gas and birth, rely on the law of the four seasons and long, its physiological activities and the natural world of yin and yang, the five elements of change is closely linked to the natural world, and therefore conform to nature is the basic principle of health, the reverse is prone to disease. The human body as an organic whole, centered on the five organs, through the meridians and blood interconnected, constraints and balance. The liver as the general of the official, in the five organs plays an important role in regulating.

2. Theoretical Basis for Nourishing the Liver in the Four Seasons

2.1 Physiological Characteristics of the Liver

Liver is known as the “general’s officer” in Chinese medicine theory, with physiological characteristics such as excretion, blood storage, and main tendon, etc. Liver’s main excretion includes the regulation of qi, the regulation of emotions, the promotion of digestion and absorption, and the operation of blood. If the liver’s function of detachment and excretion is normal, it can maintain the smoothness of the whole body’s qi and the operation of qi and blood, while the malfunction of the liver’s function of detachment and excretion leads to the stagnation of the whole body’s qi and the emergence of depression, irritability, etc. Meanwhile, the liver’s failure of detachment and excretion leads to the malfunction of the spleen’s and stomach’s function of transporting and digesting and the abnormality of the secretion and excretion of bile,

which ultimately affects the digestion function.

2.2 Relationship between the Liver and the Four Seasons and Five Viscera

According to Chinese medicine, the liver is wood, the organ of wind and wood, the liver qi rises and develops, and it likes to be organized and is evil to be depressed, and it is advisable to keep the liver qi soft and organized and smooth, and the liver corresponds to the spring in the four seasons, and the liver mainly rises and develops, and the liver is like a tree in general, and in the spring, when everything recovers, it contains the power of rising and developing, and spring is a season of vigor, and the liver qi is most flourishing in the spring, therefore, in the spring when yang qi rises, and when the liver qi is flourishing, it is easy to lead to the hyperactivity of the liver or the disorder of detoxification. Therefore, when Yang energy rises in spring, the exuberance of Liver energy can easily lead to over-exuberance of Liver Yang or malfunction of detoxification. When liver qi is properly detoxified in spring, the body’s qi is smooth, and qi, blood and fluid run smoothly, while when detoxification is not normal, it is easy to lead to qi and blood stagnation, fluid metabolism imbalance, and produce blood stasis, phlegm-dampness and other pathological products [2]. The heart belongs to fire, through the summer, in the five elements, wood is the mother of fire, summer yang is strong, liver qi is also in an active state, summer nourishing the liver can help the liver’s rise and regulate the function. In summer, when the heart is on fire and the liver qi is in discomfort, there will be discomfort such as heartburn and insomnia. At the same time, the combination of humidity and heat in summer can easily cause dampness to invade the liver, affecting the normal function of the liver and wood, and even triggering the imbalance phenomenon of “the spleen and earth multiplying and insulting the liver and wood”. In summer, due to high temperature and large amount of sweating, it is easy to lead to the loss of water and sweat in the body, which in turn affects the blood supply to the liver. Summer heat, the human body is prone to dryness and heat, mood swings, lack of sleep, etc., leading to the liver qi stagnation, emotional and emotional disorders, and increase stress. Summer heat, people are prone to eat cold food, injury

to the spleen and stomach, the body of dampness transport failure, then dampness and heat within the trapped spleen injury to the liver and lead to the liver and gallbladder dampness and heat, so the focus of the liver in summer is to clear the heat and dampness, liver and qi. Lung belongs to gold, through the fall, the dry climate in the fall is easy to hurt the liver. Lung and liver have the function of regulating the body's qi, and the lung's function of declaring and purging depends on the promotion of the liver's qi. Su Wen - The Theory of the Forbidden Surgery says: "The liver is born on the left, and the lungs are hidden on the right". Su wen - yin and yang should be like the theory said: "left and right, yin and yang of the road also". Liver ascending lung descending, lift appropriately, in and out of the alternation, the qi can be smooth. Therefore, in the fall to nourish the liver should be nourished yin moist dryness, regulating the gas. Kidney is water, through the winter, water can produce wood, liver and kidney the same source, winter liver not only helps to drain liver qi, blood and hidden essence, but also to promote the whole body qi and blood flow, enhance immunity. Winter is cold, the human body Yang Qi latent in the inner, yin gas is full of extreme, at this time should comply with the laws of nature, to protect the body's yin essence, so that the essence of the internal cohesion to moisturize the five viscera and six bowels, the liver as a general officer, responsible for directing and regulating the whole body qi and blood operation. Winter kidney qi is strong, water can nourish the liver wood, so that the liver blood is sufficient, liver qi smooth, so winter liver is particularly important.

3. Specific Practices for Nourishing the Liver in the Four Seasons

3.1 Dietary Regimen

In spring, we should eat a light diet, avoiding oily, spicy and cold foods, so as not to damage the spleen, stomach and liver qi excretion function. Chinese medicine believes that acidity into the liver, can nourish the liver and liver protection, moderate consumption of lemon, hawthorn and other acidic foods, help to promote digestive secretion to help the liver metabolism, at the same time, should be appropriate to eat sweet food, sweet into the spleen and stomach, eating jujube, yam, millet and other foods, help to nourish the liver and replenish the spleen, the appropriate increase in the sweet taste and an appropriate amount of acidity can be to protect the spleen and stomach and nourish the body. Can eat more green vegetables, such as spinach, celery, parsnip, etc., which is rich in vitamins and minerals, has the effect of clearing the liver and laxative, nourishing yin and moistening dryness. Among them, spinach has the function of nourishing blood to stop bleeding, calming the liver and brightening the eyes, moistening the bowels and laxatives. Spinach and pig liver with, can play a role in nourishing the liver and blood, spinach and celery with can calm the liver and lower the effect of pressure. Summer weather is hot, easy to consume on the yin fluid, promote liver fire, at the same time, the summer dampness and heat of the evil exuberant, dampness injection easy to trapped liver meridian. Therefore, the summer liver should be clearing heat, spleen and dampness. More bitter melon to clear the liver fire, detoxification; more green beans

to clear heat and detoxification, diuretic swelling, in order to help the liver detoxification. In addition, summer sweating, need to supplement water in a timely manner to maintain the body's water balance, in order to promote liver detoxification. In the fall, the climate is dry, and the human body is susceptible to the attack of dryness, resulting in liver qi stagnation and liver blood depletion. Chinese medicine believes that "the liver is wood, the lung is gold", the lung in the fall when the lung gas, the lung gold is strong gram liver wood, so the focus is on nourishing yin and moistening dryness, liver qi, blood soft liver, to avoid the rise of liver fire, liver blood depletion, eating ginger nut, lily and other foods to nourish yin and moisten dryness; eating wolfberry, jujube to nourish the blood and soft liver; soak in rose, chrysanthemum, etc. to regulate the qi, liver depletion and depression. The winter climate is cold, the body's yang qi. Winter climate is cold, the human body Yang Qi convergence, the liver's blood function, Chinese medicine believes that the liver body Yin and Yang. Kidney main water, through the winter, the liver is wood, through the spring, the kidney main essence, liver blood, winter nourishes the kidney essence, kidney essence can be sufficient to generate liver blood, liver yin can nourish kidney yin, liver blood can also nourish the kidney essence, therefore, winter nourishes the liver in order to soften the liver and tonify the kidneys, eating black sesame seeds can tonify the liver and kidneys, lubricate the intestines and pass the bowel movement [3]; eating goji berries, mutton can be warmed to tonify the qi and blood; eating jujubes can be nourished by the blood of the liver.

3.2 Physical Exercise and Daily Living

Spring temperatures rise, the human body Yang Qi rise, the liver is strong, the human body qi and blood began to drain outward, the metabolism is accelerated, the spring exercise should be to dredge the liver, rise Yang Qi, soft and slow stretching for the principle. If you can take a walk. Yellow Emperor's Classic of Internal Medicine that "spring in March, wide walk in the court", emphasizing the spring should be more walking. Walking can relieve the liver and promote the circulation of qi and blood. In summer, when the temperature is hot, prolonged outdoor activities will accelerate sweating, depletion of qi and injury to fluids. The liver is the main tendon, indoor yoga can stretch the tendons and bones, at the same time, the soothing rhythm can ease the tension, can ease the liver to relieve depression, promote liver detoxification. Swimming can also be done in the water to dissipate heat, to avoid heat injury to the liver. Swimming is also an excellent exercise for some fatty liver patients to consume the lipid energy of the liver. Autumn human body yin and yang qi and blood in the introverted state, so the intensity of exercise should be slightly sweating is appropriate, avoid sweating or overwork, can be eight brocade, taijiquan and other traditional fitness, dredge the meridians and promote the operation of qi and blood. Winter is mainly "closed", so in terms of exercise, gentle, can be moderate indoor stretching exercises. In addition to exercise, the key to liver health is regular work and rest, "people lie down, blood returns to the liver", Chinese medicine believes that 1-3 a.m. is the ugly time, the liver meridian is in order, but the liver from 11 p.m. to enter the repair state, so it is recommended to try to go to sleep before 11 p.m., to ensure that the eight hours of sleep [4].

3.3 Psychological Adjustment

The liver likes to be organized and evil depression, spring liver qi rise, easy mood swings, so you should relax the pressure, in case of calm and cool, to avoid anger hurt the liver. Summer heart fire, easy to attract liver fire, should be quiet to lower the fire, liver relief, moderate meditation, focus on breathing, relaxation of the body and mind, 11-13 hours for the heart meridian when the order of the day, at this time to close the eyes and rest can lower the heart fire, safe liver soul. Autumn climate turns cool, everything withers, easy to trigger "sad autumn" emotions, people are prone to anxiety, depression, irritability. The liver is the master of emotions, emotions will lead to liver qi stagnation, long-term liver qi not sparse, and then aggravate anxiety, a vicious cycle. Therefore, you can listen to some soothing music, make the mood relax, cultivate hobbies, transfer anxiety. Winter is cold, sunshine is reduced, the human body yang qi introverted, easy to mood, depressed, so in winter should maintain sufficient sunlight, more sunshine, vegetarian to reduce the intake of negative information, avoid staying up late, early bedtime to maintain Tibetan conservation of liver, for the next year to lay the foundation for health.

4. The Scientific Connotation of Liver Nourishment in the Four Seasons

Liver nourishment in the four seasons not only has specific manifestations in Chinese medicine theory, but also modern medicine has directly or indirectly proved the relationship between the four seasons and the liver. The different seasons have a great influence on the metabolism of the liver. Among them, melatonin, as a hormone secreted by the pineal gland, plays a role in regulating the body's biological clock and promoting sleep, which is closely related to the practice of sunlight. Melatonin secretion is inhibited during the day when sunlight is strong, and it is promoted at night when light is dark. Similarly, in the spring, the sunlight time gradually becomes longer, melatonin secretion is reduced, the liver is the final metabolic site of melatonin, melatonin can improve immunity, enhance the body's anti-virus ability, but also clear free radicals, reduce liver damage [5]. In summer, high temperature, sweating, the body water is relatively reduced, therefore, blood viscosity increases [6], bile will be concentrated, bile metabolism malfunction, easy to cause gallbladder stones. In the fall, the temperature difference between day and night is large, sympathetic nerve excitation, vasoconstriction, liver vasoconstriction will lead to insufficient supply of oxygen to hepatocytes, which will trigger hepatocyte damage or dysfunction. For example, in some chronic liver diseases, enhanced hepatic vasoconstriction leads to reduced blood flow in the hepatic sinusoids and insufficient blood perfusion to the hepatocytes, thereby aggravating the hypoxic state of the hepatocytes and further promoting hepatic fibrosis and deterioration of liver function [7]. In winter, the temperature is lowered, the white fat anabolism in the body is accelerated, but the catabolism rate is reduced, coupled with the cold climate, people are more static and less active, which makes the accumulation of fat, resulting in the formation of fatty liver.

5. Discussion and Prospects for Liver Nutrition in the Four Seasons

With the development of society and economic growth, people pay more and more attention to their own health, and the theory of traditional Chinese medicine of the four seasons of health has been more verified in modern medical research. People pay more attention to preventing diseases before they occur, and preventing the occurrence and aggravation of diseases by means of diet, exercise and emotional conditioning. With the advancement of science and technology and the emergence of Ai, people can upload their own relevant information, analyze the big data through the network, and formulate a more scientific and reasonable health guidance program based on the physique of different groups of people, so as to provide people with more comprehensive guidance.

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