

Treatment of Diabetes under the Guidance of Huangdi Neijing: Integrating Traditional Chinese and Western Medicine

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Abstract: This paper explores the understanding of diabetes (referred to as "xiao ke") in Huangdi Neijing and its inspiration for modern diabetes treatment. By conducting an in-depth analysis of the relevant content in the classics and integrating it with modern medical research, the paper elucidates the significance of Huangdi Neijing in the treatment of diabetes from the perspectives of etiology, pathogenesis, diagnosis, treatment principles, and methods. The article emphasizes the importance of holistic concepts, syndrome differentiation and treatment, dietary regulation, emotional control, and exercise for health, providing new insights and methods for the integration of traditional Chinese and Western medicine in the treatment of diabetes.

Keywords: Huangdi Neijing; Xiao Ke; Diabetes; Integration of Chinese and Western Medicine

1. Introduction

Diabetes is a metabolic disorder primarily characterized by hyperglycemia, posing a significant risk to human health. With the acceleration of China's aging population and changes in lifestyle, its incidence continues to increase^[1]. Currently, modern medicine employs a combination of drug treatment, dietary management, and exercise therapy to address diabetes, but there are still certain limitations in its treatment and control^[2]. Huangdi Neijing, as an important classic in traditional Chinese medicine, has profound insights into the etiology, pathogenesis, diagnosis, and treatment of xiao ke (diabetes), providing important theoretical references and practical insights for the prevention and treatment of modern diabetes.

2. Understanding of Xiao Ke in Huangdi Neijing

2.1. Etiology and Pathogenesis

2.1.1. Insufficient Endowment

Huangdi Neijing indicates that the occurrence of xiao ke is closely related to insufficient innate endowment. In "Lingshu: Wu Bian," it is mentioned: "Those with weak five viscera are prone to diabetes." This suggests that defects in innate endowment and weakness of the five viscera are internal causes leading to the development of xiao ke.

2.1.2. Unregulated Diet

Diet imbalance is one of the important factors leading to the onset of xiao ke according to the Neijing^[3]. In "Suwen: Qi Bing Lun," it is pointed out: "Those who frequently consume sweet and fatty foods are more likely to be obese, and obesity leads to internal heat, while sweetness causes fullness, hence the qi overflows upwards, leading to xiao ke." This indicates that long-term overconsumption of fatty and sweet foods can easily lead to the accumulation of heat in the spleen and stomach, causing qi stagnation and consumption of water and grain essence, thereby inducing xiao ke^[4].

2.1.3. Emotional Dissonance

Emotional dissonance is also an important factor in inducing xiao ke. In "Lingshu: Wu Bian," it is

mentioned: "Anger causes qi to rise inversely, accumulating in the chest, causing blood and qi to flow backward, filling the skin and muscles, and obstructing the blood vessels, turning into heat, which then consumes the skin and muscles, hence causing diabetes." This indicates that emotional discomfort leads to qi stagnation, liver qi stagnation turning into fire, and subsequently damaging body fluids, thereby inducing xiao ke.

2.1.4. Overexertion and Excessive Desires

Overexertion and excessive desires leading to the consumption of kidney qi are also one of the causes of xiao ke. In "Suwen: Shang Gu Tian Zhen Lun," it is mentioned: "Taking alcohol as a drink, taking recklessness as the norm, getting drunk and entering the room, exhausting the essence with desire, dispersing the true qi, not knowing to hold fullness, not controlling the spirit at the right time, seeking only to please the heart, going against the joy of life, without regular daily routines, hence decaying at fifty." This illustrates that overwork, excessive indulgence, and irregular daily routines can lead to kidney essence deficiency, lower heat accumulation, and virtual fire disturbing the upper body, damaging the kidneys, thereby inducing xiao ke^[5].

2.2. Diagnosis

Huangdi Neijing's diagnosis of xiao ke is primarily based on symptoms and pulse. The term "xiao ke" first appeared in "Suwen: Qi Bing Lun," which mentioned: "Those with a sweet mouth... turn into xiao ke"^[6], indicating that a sweet mouth is one of the early manifestations of xiao ke. In "Suwen: Tong Ping Xu Shi Lun," it was asked: "What is the difference between the deficiency and excess of xiao ke?" Qi Bo replied: "A solid and large pulse, the disease can be treated for a long time; a suspended, small, and firm pulse, the disease cannot be treated for a long time." This shows that the pulse can be used to judge the deficiency and excess of xiao ke, as well as the prognosis of the disease.

2.3. Classification

Huangdi Neijing classifies xiao ke into three types: upper, middle, and lower. In "Suwen: Qi Jie Lun," it is mentioned: "The heart transfers heat to the lungs, leading to diaphragm consumption. Lung heat is transmitted to the kidneys, causing spasms; kidney heat is transmitted to the spleen, leading to weakness, intestinal decay, and death, which cannot be cured. Here, diaphragm consumption corresponds to upper xiao ke, with the main manifestations of thirst and frequent drinking; spasms are lower xiao ke, with frequent and turbid urine like fat; weakness and intestinal diarrhea belong to middle xiao ke, with symptoms including increased appetite, easy hunger, and loose stools.

3. The Guiding Significance of Huangdi Neijing for the Treatment of Xiao Ke

3.1. Holistic Concept

Huangdi Neijing emphasizes that the human body is an organic whole, with the five viscera and six bowels being interrelated and influencing each other. In the treatment of xiao ke, a systematic and personalized nursing intervention plan should be formulated from a holistic perspective to maximize the improvement of the patient's prognosis^[7]. For example, while treating xiao ke, it is important to regulate the functions of the spleen, liver, kidneys, and other viscera to achieve a holistic therapeutic effect.

3.2. Syndrome Differentiation and Treatment

Huangdi Neijing proposed the concept of "treatment based on syndrome differentiation," emphasizing the need to analyze the patient's symptoms, signs, and pulse comprehensively to fully understand the causes, mechanisms, locations, and nature of the disease, thereby formulating personalized treatment methods. In the treatment of xiao ke, different treatment methods should be adopted according to different syndromes. For example, upper xiao ke is primarily treated by clearing heat and moistening the lungs, producing fluid, and quenching thirst^[8]; middle xiao ke focuses on clearing stomach fire and nourishing yin to increase fluid; lower xiao ke mainly involves nourishing yin and moistening dryness to quench thirst.

3.3. Dietary Regulation

Huangdi Neijing places great emphasis on the importance of diet in disease treatment. In the treatment of xiao ke, the diet should be reasonably adjusted to avoid excessive intake of high-fat, high-sugar, and spicy foods, and increase the intake of coarse grains, vegetables, and fruits rich in dietary fiber. At the same time, maintain regular and moderate eating to avoid overeating. For spleen and stomach damp-heat, it is appropriate to use ingredients such as Peilan, which have the effect of resolving dampness and awakening the spleen for regulation^[9]. For example, in "Suwen: Qi Bing Lun," it is mentioned: "Treat it with orchid to remove old qi." Here, "orchid" refers to Peilan, which has the effect of fragrant dampness resolution and spleen-awakening appetite, and can be used to alleviate symptoms of sweet mouth caused by spleen and stomach damp-heat, playing a certain role in the treatment of xiao ke.

3.4. Emotional Regulation

Huangdi Neijing believes that emotional disorders are one of the key factors leading to diseases. In the treatment of xiao ke, it is necessary to pay attention to emotional regulation, maintain a positive attitude, and avoid excessive tension, anxiety, or depression. Pressure can be relieved and emotions can be adjusted through listening to music, walking, or meditation. For example, in "Suwen: Shang Gu Tian Zhen Lun," it is mentioned: "Tranquil and empty, the true qi follows, the spirit is internally guarded, and the disease comes from where." This emphasizes the importance of maintaining a peaceful state of mind and a calm spirit for health.

3.5. Exercise and Health Preservation

Huangdi Neijing advocates "no decay with movement," believing that moderate exercise can enhance physical fitness and prevent diseases. In the treatment of xiao ke, it is recommended that patients engage in appropriate exercise, such as walking, jogging, or practicing Tai Chi. Moderate exercise not only helps to regulate blood sugar levels but also improves insulin response ability, enhances cardiovascular health, and promotes the overall improvement of physical condition^[10]. However, it is necessary to reasonably arrange the intensity and duration of exercise to avoid overexertion. For example, in "Suwen: Shang Gu Tian Zhen Lun," it is mentioned: "The body is laborious but not tired, the qi follows and is smooth, each follows its desire, and all get what they wish." This indicates the importance of moderate exercise for health.

4. Modern Medicine's Understanding of Diabetes

4.1. Etiology

Modern medicine believes that the occurrence of diabetes is mainly influenced by genetic, environmental, and lifestyle factors^[11]. Genetic factors play a key role in the occurrence of diabetes and often show a clear family hereditary tendency. Environmental factors involve unhealthy lifestyles, unbalanced dietary habits, lack of exercise, and excessive psychological pressure. In addition, immune system abnormalities are also one of the main causes of Type 1 diabetes.

4.2. Pathophysiology

The pathophysiological characteristics of diabetes mainly manifest as insufficient insulin secretion or impaired function, leading to increased blood sugar levels. Long-term high blood sugar levels can lead to various complications, such as diabetic nephropathy, retinopathy, nerve damage, and diabetic foot.

4.3. Diagnosis

Modern medicine diagnoses diabetes mainly by blood sugar testing. If fasting blood sugar reaches or exceeds 7.0 mmol/L, and postprandial 2-hour blood sugar or random blood sugar reaches or exceeds 11.1 mmol/L, diabetes can be diagnosed. In addition, glycosylated hemoglobin measurement, insulin release tests, and C-peptide release tests can be used to assess the patient's blood sugar control and pancreatic function status.

4.4. Treatment

Modern medicine uses a variety of methods in the treatment of diabetes, including drug intervention, dietary control, physical exercise, blood sugar monitoring, and health education. Drug treatment is the core method^[12], often using insulin or oral hypoglycemic drugs. Dietary management, as the foundation of treatment, requires reasonable adjustment of diet, limiting the intake of high-sugar, high-fat, and high-salt foods. Exercise can not only enhance physical fitness but also improve insulin sensitivity, helping to stabilize blood sugar levels. Blood sugar monitoring can help to grasp the fluctuations of blood sugar in a timely manner, thereby optimizing the treatment plan. Health education helps patients to deeply understand diabetes and improve their self-management ability.

5. Integration of Huangdi Neijing and Modern Medicine in the Treatment of Diabetes

5.1. Holistic Concept and Comprehensive Treatment

The holistic view advocated by Huangdi Neijing is highly compatible with the comprehensive treatment concept of modern medicine. In the treatment of diabetes, attention should be paid to overall regulation, fully considering various factors such as the patient's physical condition, mental health, and living environment, combining drug treatment, dietary management, exercise, blood sugar monitoring, and health education, aiming to effectively control blood sugar levels and reduce the occurrence of complications.

5.2. Syndrome Differentiation and Treatment and Individualized Treatment

The concept of syndrome differentiation and treatment in Huangdi Neijing provides a reference for individualized treatment in modern medicine. In the treatment of diabetes, different treatment methods should be adopted according to different syndromes. Therefore, in clinical treatment, personalized treatment plans should be formulated based on the patient's gene detection results^[13].

5.3. Dietary Regulation and Nutritional Treatment

The dietary conditioning ideas proposed by Huangdi Neijing have many similarities with the concept of nutritional treatment in modern medicine. In the treatment of diabetes, the dietary structure should be scientifically adjusted to avoid excessive intake of high-fat and high-sugar foods and spicy irritants, and choose more coarse grains, vegetables, and fruits rich in dietary fiber. At the same time, modern medicine can accurately calculate the daily required calories and nutritional ratios based on the patient's height, weight, age, and daily activity, to tailor personalized dietary plans for patients.

5.4. Emotional Regulation and Psychological Treatment

The concept of emotional regulation in Huangdi Neijing complements the psychological treatment in modern medicine. Emotional factors have an important impact on the occurrence and development of diabetes, and emotional regulation is particularly crucial in the prevention and treatment of diabetes^[14]. In the treatment process, attention should be paid to regulating emotions, maintaining a peaceful state of mind, and avoiding tension, anxiety, or depression. At the same time, modern medicine can help patients relieve stress and enhance their self-management ability through psychological counseling and cognitive-behavioral therapy.

5.5. Exercise and Health Preservation and Rehabilitation Treatment

The concept of exercise and health preservation emphasized in Huangdi Neijing complements the concept of rehabilitation treatment in modern medicine. Huangdi Neijing advocates "no decay with movement," opposes long-term "sitting" or "lying down"^[15], and advocates maintaining health through moderate exercise. In the treatment process of diabetes, it is recommended that patients choose appropriate exercise methods, such as walking, jogging, or Tai Chi. These exercises not only help to promote blood circulation and improve metabolism but also effectively regulate blood sugar levels. At the same time, modern medicine can combine rehabilitation training and physical therapy to help patients recover physical function and further improve the quality of life.

6. Conclusion

Huangdi Neijing, as a treasure of traditional Chinese medicine, has a profound understanding of the etiology, mechanism, diagnosis, and treatment of xiao ke (diabetes). Its theories on holistic concepts, syndrome differentiation and treatment, dietary regulation, emotional regulation, and exercise and health preservation provide valuable experience and inspiration for the modern treatment of diabetes. In the treatment of diabetes, the theories of Huangdi Neijing should be combined with modern medical methods, fully considering multiple factors such as the patient's physical condition, mental health, and living environment, adopting a variety of measures such as drug treatment, dietary management, exercise, blood sugar monitoring, and health education, to better control blood sugar levels and prevent complications. At the same time, research on diabetes should continue to deepen, exploring new treatment methods and means, improving the overall medical level, thereby providing patients with higher quality treatment.

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