

Current Status of Research on Kidney and Psychiatric Disorders (Dementia as an Example)

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Abstract: *Dementia is a relatively severe and persistent cognitive disorder. It is characterized by slowly progressive intellectual decline, accompanied by varying degrees of changes in behavioral patterns and interpersonal relationships, but there is no impairment of consciousness. It is a group of clinical syndromes, the etiology of dementia is many, most of the dementia in modern medical research is often due to brain damage or brain lesions, and in the Chinese medicine theory system of the cognition of this syndrome and the five organs of the five organs of the official - the kidney has a close connection, the mechanism of the trick can be explained through the following points of view: the kidney is the master of the bone, the bone generates the marrow, the marrow is filled with the brain (brain is the sea of the medulla oblongata), the brain is the house of the spirit of the first, and the whole body is closely related through the meridians, has the ability to regulate the whole body, has the ability to regulate the whole body, has the ability to regulate the whole body. The whole body is closely associated with the physiological functions of the body and preside over the thinking and consciousness activities, regulate emotions, dominate and control the behavior of the integrated role of the brain for the essence, gas, God, three infusion of the Qi Heng of the internal organs, to the essence for the body, the gods for the use of the three through the mutual sustenance, the transformation of each other so that the body through the qi to achieve normal physiological functions, thus showing the body's flexibility and agility of the process of activities, meticulous and subtle thinking and consciousness, and rich expression of emotions, very good. As well as rich emotional expression, it is a good reflection of the role of "Kikyo" and the mechanism of coordination and unity within the human body. In view of the dementia symptoms caused by various diseases in modern medicine, this paper mainly expounds on the dialectical relationship between various parts of the organism in the Chinese medicine theory system in terms of etiology, pathogenesis and clinical diagnosis and treatment.*

Keywords: Kidney, Chi, Dementia, Fear.

1. "Kidney Stores Essence, Main Ambition" is Related to Memory Signal Storage

1.1 The Meaning of Zhi in Chinese Medicine

What we usually mean by "Zhi" is cognition, which refers to what is formed on the basis of memory and is a manifestation of the external activities of the human body, including essence and spirit [1]. They are, respectively, the innate essence formed in the human body and the essence of water and grains obtained later in life that provide nourishment [2]. It is mentioned in Ling Shu - Ben Shen: "Therefore, the birth of the coming is called the essence, with the God and the movement of the person is called the soul, and the essence and the access is called the prana, so that any object is called the heart, the heart has the so-called intention, the intention of the existence of the so-called Zhi.....". Therefore, Zhi and essence, God, soul, prana, intention, wisdom from the same substance, only their names are different. Chi in the narrow sense refers to the intentional mental processes with a clear goal, including human memory, willpower and some emotional activities. Therefore, it can be seen that "the kidney is the master of ambition" is also related to neuropsychological aspects to a certain extent. Recognizing that the kidney is the master of ambition from the perspective of modern psychology enriches the connotation of Chinese medicine, and provides a theoretical basis for the treatment of psychiatric disorders from the perspective of the kidney [4].

1.2 Relationship between Kidney and Memory Signal Storage

Analyzed by the article "Exploring the mechanism of kidney

tonic Chinese medicine to improve learning and memory ability based on the abnormal expression of hippocampal Ca⁺ signaling in kidney-deficient rats", the experimental results showed that the learning ability of kidney-deficient rats was significantly lower, and their memory ability was related to with the elevated positive expression of CaN and Calpain-1 in hippocampal area [5]. Then the three groups of mice were treated with tonifying the kidney, tonifying the heart and sparing the liver to reduce the positive expression of CaN and Calpain-1. This operation could improve the learning and memory ability of mice. The mice in the kidney tonic group directly improved kidney function through kidney tonic treatment, which is based on the principle that kidney stores essence, essence produces marrow, and marrow leads to the brain. The experimental results also showed that the improvement of learning and memory ability in the kidney tonic group was better than that in the heart tonic group and liver sparing group. The experimental results also further confirmed the close relationship between kidney and Chi [6-8]. According to the physiological and pathological characteristics of renal deficiency and its formation factors, the principle of renal deficiency modeling was established. Firstly, the factors causing renal deficiency were clarified, and according to the principles of Chinese medicine of innate endowment insufficiency, injury to the kidney by fright and fear, injury to the kidney by excessive indoor labor and the physical changes in the acquired body, the experimental animals were treated accordingly, and then the animals receiving the treatments were observed whether they had any manifestation of renal deficiency or not. This experiment can prove that kidney storage of essence is inseparable from memory storage, and when kidney essence is deficient and kidney function is insufficient, it is easy to easily cause

various disease states [9-10].

2. The Relationship between "the Kidneys Store Essence and are the Master of Ambition" and "Fear".

2.1 The Difference between "Fear" and "Panic" and the Pathological Manifestations of Dysfunction

Fear refers to the natural emotion of being strongly afraid of a certain type of thing, a special situation or a certain type of activity [15]. People usually compare fright with fear in daily life, but there are some differences between them. Among them, fright is unawareness, not subject to one's subjective control, and is an emotional experience caused by a sudden external stimulus; whereas fear is self-awareness, and is a subjective feeling of some situation that one finds frightening and cowers [16-17]. Suwen - Lifting Pain Lecture" says: "Fear is the lowering of qi, and fright is the disorganization of qi." It also indicates at the same time that the nature of the two is very different. Kidney in Zhi is fear, mainly manifested in the pathological state, fear is easy to damage the kidneys, that is to say, in the situation of extreme fear, kidney damage and manifested as the failure of sealing and storage, specifically manifested as seminal emission, spermatorrhea, incontinence of urine and faeces, slippery fetus abortion, etc. [18-19]. As stated in "Ling Shu Jing - Ben Shen", "Fear and unresolved will injure the essence, and essence injury will result in bone acid impotence, and the essence will go down from time to time."

2.2 Relationship between "Fear" and Emotions and Spirits

In "Huang Di Nei Jing", emotions are divided into five categories, namely, anger, joy, thoughts, sadness and fear, which is part of the five elements doctrine of Chinese medicine. According to the theory of the five elements, the correspondence between the five emotions and the five viscera is that the heart is joyful in the emotions, the liver is angry in the emotions, the spleen is thoughtful in the emotions, the lungs are sad in the emotions, and the kidneys are fearful in the emotions. Suwen. Lifting pain theory" said: "fear is gas down" gas for the mechanism of disease. It means that after being frightened, you suddenly feel fear and discomfort, which leads to qi subsidence and a series of pathologies such as damage to kidney qi, such as urinary and fecal incontinence, spermatorrhea, spermatorrhea and premature ejaculation, etc. [19].

3. The Relationship between "Kidney Essence, Main Ambition" and Intelligence

The innate essence stored in the kidneys is used to generate vital energy in the human body, thus exerting its qi function to stimulate the normal operation of other internal organs and enable the body to carry out creative activities, while the innate essence is nourished by the innate essence generated by the spleen and stomach, which serves as an important material basis for the growth and development of the human body as well as reproductive functions, and has a very important dominant role in the spiritual and conscious thinking of

human beings. The heart - the house of God and the kidney in the physiological state and spiritual aspects of the system and complement each other's inner connection, focusing on the relationship between the two in the spirit of mutual use - the heart hides the God, the dominant human life activities, while the God can be beneficial to the essence of the kidneys to store the essence, the essence of the Zhi, accumulation of essence all the God, the spirit of the internal guard, the fire and the water together, then the God's will to be at peace. The heart has the ability to receive and store things from the outside world, and the kidney consolidates and enhances this ability, reflecting the diversity, sensitivity and flexibility of spiritual and conscious thinking activities in the human body. Kidney essence refers to hide the essence of the five viscera and six viscera (i.e., the essence of the latter); it is to hide the essence of the kidney organ (i.e., the essence of the innate). Kidney essence is based on the essence of the innate, and the essence of the innate is auxiliary. The innate essence is endowed by the parents, and the essence of the innate depends on the essence of water and grains, and also depends on the essence of the five viscera and six bowels to hide it. Kidney essence, the main growth and development and reproduction, the essence of the kidney can promote the growth of the body, development. At the same time can maintain the normal reproductive function. The essence of the kidney sheds the will, and the will refers to a person's conscious activity. The Spiritual Pivot Jing-Ben Shen said, "So the one who appoints things is called the heart, the heart has a memory that is called the intention, and the intention that is stored is called the Zhi." It means that the heart can receive objective things from the outside world, and make a kind of image reaction to the objective things and then store them. The Spiritual Pivot Jing - Ben Shen" and the cloud: "The kidney stores the essence, and the essence sheds the will." It means that the kidney essence can produce marrow to nourish the brain and maintain one's ability to memorize, so if the essence of the kidney is insufficient, the brain loses its nourishment, and forgetfulness and trance can be seen, which eventually leads to dementia [20].

4. Clinical Features of the Pathology of "the Kidneys Store Essence and are the Masters of Ambition

4.1 The Concept and Etiology of Dementia.

Take dementia as an example to analyze the characteristics of clinical lesions caused by deficiency of kidney meridian.

Concept: Dementia is a disease of mental abnormality caused by the decrease of brain and marrow or the blockage of brain channels by phlegm and blood stasis, which leads to the failure of the divine mechanism, and it is a kind of hypogonadism with the main clinical manifestations of stupidity and foolishness, low intelligence and forgetfulness.

Etiological factors: internal obstruction of blood stasis and blockage of cerebral collaterals; prolonged thinking and anxiety, deficiency of qi and blood; old age and physical weakness, deficiency of kidney essence; emotional and emotional injuries, phlegm and dampness; and also due to congenital endowment insufficiency and loss of nourishment in later life [21].

Pathogenesis: The core pathogenesis is the loss of kidney essence caused by the loss of marrow and brain, and the loss of the use of the divine mechanism. The disease is located in the brain, and is related to the heart, liver, spleen and kidney, and is especially close to kidney deficiency. The disease mechanism is not outside the four ends of deficiency, silt, phlegm, and fire, and it is the underlying deficiency and the underlying reality [22].

4.2 Clinical Symptoms of Dementia

Dementia is mainly manifested as stupid behavior, low intelligence, forgetfulness, low intelligence is the most important manifestation, followed by a significant reduction in comprehension, memory, judgment, calculation, logic and thinking. Secondly, some of them also have odd behavior, slow reaction, indifferent expression, and few words, and secondly, some of them also show repetitive language, selfishness and narrow-mindedness, stubbornness and paranoia, and sometimes, they can also show unreasonable joy, easy to be agitated or angry, childish and absurd behaviors, lack of ethical and moral consciousness, lack of shame, and even can not take care of their own lives [23].

4.3 Cure for Dementia

The rule of treatment: replenish the deficiency and catharsis, "deficiency" refers to the lack of positive qi, and "reality" refers to the surplus of evil qi. The treatment of dementia is to help the positive energy and get rid of the evil energy.

Treatment: The treatment of dementia is divided into two aspects: the deficiency is to support the positive qi, i.e., tonifying the kidney and filling the marrow, replenishing qi and blood; the real is to get rid of the evil qi, i.e., dissolving phlegm and resolving depression, activating blood circulation through the orifices, and calming the liver and diarrhea fire. The key to dementia is to tonify the kidney, and its core pathology is kidney deficiency, while in the process of tonification, attention should be paid to slow tonification, strange diseases have more phlegm, and long illnesses have more siltation, dementia should focus on activating blood circulation and removing blood stasis, and at the same time, focus on the application of opening the orifices and waking up the mind and the wind medicine [24-25].

5. Relationship between Renal Chiropractic Lesions and Dementia and Examples of Medical Cases.

5.1 The Relationship between Kidney and Dementia

5.1.1 Cerebral medulla comes from renal essence, and the structure of kidney and brain are closely related, both of them are inseparable and interacting with each other in physiology and pathology. The main disease of dementia is the veins of the brain. If the kidney essence is insufficient, the brain marrow is not nourished, and the divine mechanism is out of use. This will be manifested as clinical memory loss, low mood, stupidity and foolishness, etc. On the contrary, if the kidney essence is sufficient, the brain marrow will not be nourished. On the contrary, if the kidney essence is sufficient, the medulla oblongata is full, the medulla oblongata is full of

nutrients, then the clinical manifestation will be good memory, good mental state, clear behavioral awareness, sharp reaction thinking, clear speech logic, etc.. Therefore, dementia is closely related to the abundance or otherwise of kidney essence. If the kidney essence is deficient and the medulla oblongata is insufficient, the brain and spirit will be deprived of nourishment, resulting in dementia. The method of filling essence and marrow is the curative method for treating dementia [23-26].

5.1.2 The filling of cerebral medulla originates from kidney essence.

The Nei Jing mentions the doctrine of medulla oblongata when talking about the related functions of the brain, which believes that the medulla oblongata is transformed by the essence of the kidneys, and then sent to the brain to be entrusted to the Yuan Shen, so the brain is also called the house of the Yuan Shen.

5.2 Examples of Dementia Cases

Case 1 Zhang, male, 51 years old. Suffering from brain atrophy for more than 2 years, after the disease, gradually apathy, memory loss, depression, slow speech, intelligence greatly reduced, lumbar soreness and bone weakness, thin white moss, sunken and weak pulse. Traditional Chinese medicine believes that this disease is a loss of kidney energy, emptiness of the brain marrow, and loss of nourishment for the spirit. As stated in the "Collection and Explanation of Medical Formulas": if the kidney essence is deficient, the will is weakened, and the pathway to the heart is blocked, so there is a low intelligence, forgetfulness and stupidity. With the growth of age, people to middle age, kidney essence gradually deficiency, coupled with irregular diet, labor and leisure, emotional and emotional disorders and other reasons, resulting in internal injuries and accumulated damage, deficiency of essence, the brain marrow is gradually lost to support, and the development of dementia. Treatment is mainly to benefit the kidney and fill up the essence, plus promoting blood circulation, nourishing the heart and tranquilizing the mind, and opening up the orifices through phlegm. For the evidence of insufficient marrow, the treatment is Seven Fortune Drink Plus. The formula is equipped with ripened dihuang to tonify the kidney and nourish yin, tortoise shell glue, deer horn glue, Colla Corii Asini, Zi He Che to tonify the marrow and fill up the essence; Angelica sinensis to tonify the liver and nourish the blood; ginseng, atractylodes macrocephala, roasted licorice to benefit the qi and strengthen the spleen; Acorus calamus, Polygonatum odoratum, and almonds to dissolve phlegm and open up the mind.

Case 2 Li, male, 69 years old. Indifferent expression, withdrawn, memory loss, accompanied by lumbar and knee soreness and weakness, little food, dullness, fatigue, salivation at the corner of the mouth, pale tongue, sunken and weak pulse. The treatment is to tonify the kidney, strengthen the spleen, benefit the qi and vital essence, and the prescription is to give the addition and subtraction of the Reducing Shao Dan. Rehmannia glutinosa, wolfberry, cornelian cherry, nourishing yin and tonifying the kidney; Cistanches, Morinda citrifolia, assisting the fire of the vital

gate, tonifying kidney qi; Cortex Eucommiae and Cortex Eucommiae tonifying the liver and kidney; Codonopsis pilosulae, Poria cocos, yam, white jujubes tonifying the qi and strengthening the spleen; Calamus calamus, Polygonatum odoratum, Schisandra chinensis, promoting the orifices to tranquilize the mind. In addition, at the same time in the drug treatment, should also pay more attention to guide the patient to divert attention, more emotional regulation, intellectual and functional training and exercise should never be trivialized.

6. Conclusion

In the research on the relationship between kidney and dementia, there are many scholars with different views. As far as the current research situation is concerned, the correlation between kidney and dementia from the perspective of Chinese medicine is still relatively small, and there is a lack of information in this area at this stage due to the restriction of the research situation. In this regard, in the future research, we should grasp the direction of treating dementia by the kidney and try to study the correlation between kidney and dementia from the molecular level and subcellular aspect, expecting to make great progress in the treatment [30-31].

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