

Deficiency Type of Liver and Kidney of Intellectual Disability Based on the Theory of "Opening and Closing Pivot"

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Abstract: "Opening and closing the pivot" first appeared in "Huangdi Neijing, Suwen, Yin and Yang Clutch Theory", which describes the understanding of the transformation of meridian qi, the opening and closing of all things, and the transfer of internal organs from the three yin and three yang. "Wuchi" as the name of the disease first appeared in the "Medical Sect Jinjian". By explaining the etiology and pathogenesis of Wuchi, the author believes that the mechanism of its pathogenesis is mainly that the "block" of Yin is too much and the "pivot" of Shaoyin is too much, and by analyzing the relationship between the two, we can more comprehensively and accurately carry out better clinical differentiation and treatment of the current disease.

1. Introduction

1.1. The Origin of the Opening and Closing the Pivot

The name of the opening and closing pivot first appeared in the "Huangdi Neijing", which vividly explained the evolution of the six ideologies of the Yin and Yang clutch movement and also revealed the change law of the human body's yin and yang [1], and later due to the transmission of text and the omission of war, the records of the opening and closing pivot in various versions of the "Huangdi Neijing" over the centuries are not exactly the same, so it is difficult to distinguish right from wrong, and later generations of doctors have debated it. Because of its wide theoretical coverage and strong practicability, it has a significant guiding role in the treatment of various

contemporary clinical diseases [2]. The author runs through the six meridians and the opening and closing of the three yin and three yangs, opening and closing the pivot with the theory of meridians, yin and yang with the internal organs, and opening and closing with the theory of fate. (Figure 1)

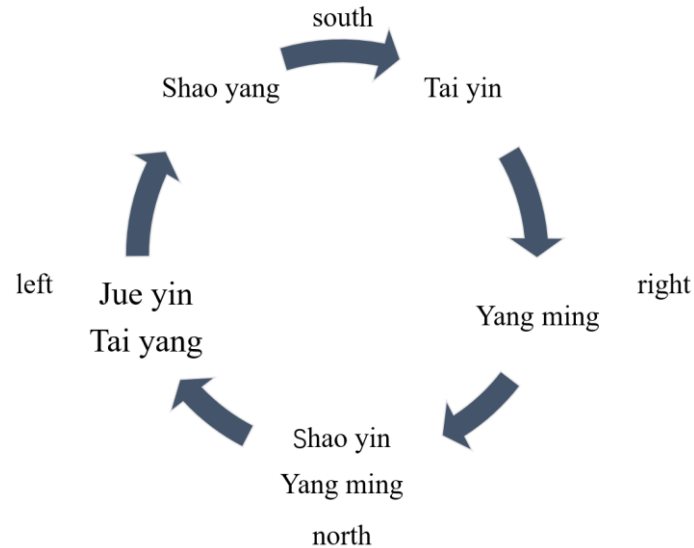


Figure 1. Open and close the pivot meridian diagram

1.2. The meaning of Opening and Closing Pivot

Opening and closing pivot refers to the overall summary of the physiological and pathological functional characteristics of the three yin and three yang meridians of the human body and their mutual relations. Specifically, in the Three Yang Sutra, the Sun Meridian is the main opening, the Yangming Meridian is the main closing, and the Shaoyang Meridian is the main pivot. In the three Yin Sutras, the Taiyin meridian is the main opening, the Jueyin meridian is the main closing, and the Shaoyin meridian is the main pivot. Among them, "open" refers to the outward role of opening, like the opening of the portal, "close" refers to the function of introverted and inward, like the closure of the portal, and "pivot" refers to the function of connecting the pivot, like the bearing of the portal. The opening, closing, and pivot also further illustrate that the six sutras are very closely linked. Later generations used the theory of opening and closing the pivot to explain the relationship between yin and yang inside and outside the human body, as Zhang Jingyue said, "The so-called open and closed pivot only wants to understand the inside and outside and distinguish its method of treatment" [3]. In the opening and closing of the pivot, Professor Liang Yonglin's theory is used to explain, using "river" to compare the functional characteristics of the three yin and three yang meridians, taking the yang meridian as an example, comparing the running line of the meridians to the scene of branching rivers converging into the sea, the solar meridian is the origin of the river, and the release of yang energy from then on is "the sun open"; The Yangming Sutra is the end of the river, and the Yang Qi finally converges here as the "Yang Ming Closing"; The Shaoyang meridian is a branch of the river, and if the way of the sun to Yangming is blocked, part of the yang energy will change the direction of its flow, so that it converges with the Yangming meridian with the help of the Shaoyang meridian. So far, it can be seen that the theory of opening and closing the pivot is contained in the three yin and three yang flow injection and transfer, with endless changes and endless life [4]. The author believes that the change of seasons can be used to further elaborate the meaning of opening and closing the pivot, spring is the season of rising and developing, representing the birth of all things, this time corresponds to "open", winter is the season of

collection, representing the sealing of all things, this time corresponds to "closed", summer and autumn are the season of fruit, representing the abundance of all things, and this time corresponds to "pivot".

1.3. Jueyin is "Closing"

In the theory of yin, where Jueyin is "Closing", it refers to the three yin of the main yin of yin, which has the meaning of convergence and cultivation. In addition, Jueyin is also the pivot of Yin and Yang access, and at the same time has the dual characteristics of hiding Yin Qi and generating Yang Qi, the author believes that from the perspective of Yin and Liver, we should first focus the perspective on the Taiyin and Spleen, the three Yin, Taiyin is the opening, taking Professor Liang's river theory as an analogy to the spleen as the source, the liver as the confluence point, the liver qi belongs to wood, the main drainage, like joy and hate depression. The medicine of the motherland believes that the liver hides blood and participates in the regulation of blood circulation throughout the body, and the "Suwen Five Organs Generation" says: "Therefore, people lie down and return blood to the liver, the liver can see when receiving blood, the foot can step when receiving blood, the palm can hold the blood, and the finger can take when receiving blood". "This is a simple summary of the physiological function of the liver and blood storage. The spleen is the foundation of the day after tomorrow, the source of biochemistry in the valley, only the spleen is strong, can the biochemical source, the source is blood, the blood is hidden in the liver, the blood is yin, the liver yin is hidden, then the liver yang is not hyperactive, and the liver yin can be nourished. On the other hand, the liver is the thief of the five internal organs, and "Knowing the Doctor Must Distinguish" said: "The five internal organs of people, but the liver is easy to move and difficult to be quiet". Other organs are sick, but self-sick ... Only one disease of the liver and extension to other organs". It means that once the liver has a pathological condition, it will be connected to other organs, so it is said that the Jueyin Closure is specifically reflected in the function of the Jueyin Blood Collection, and the gasification movement characteristic of the Jueyin Closure is the internal root of the physiological function of the liver and blood [5]. Therefore, the Jueyin Closing relaxation are moderate, and the internal and external qi and blood are harmonious, as shown in Figure 2.

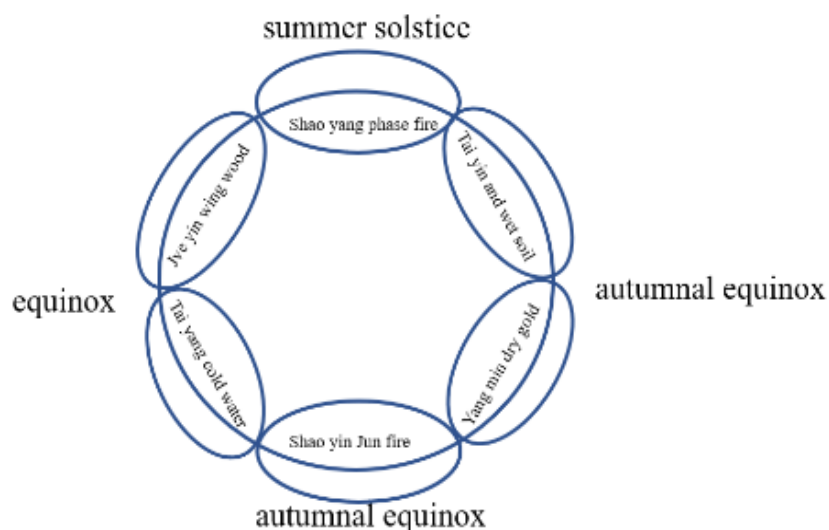


Figure 2. Schematic diagram of the four seasons of the opening and closing pivot

1.4. Shaoyin as the pivot

Pivot, for the meaning of pivot, is also the regulatory fortress of many passages. The twelve meridians circulate repeatedly, like a loop without end, and the circulation is endless. Yangming is the peak pole of yang, yin and yang are born together, and a Shaoyin is produced under the anode, urging qi and blood to transfer into taiyin, and yang ming into taiyin, which is the first channel of the pivot. Taiyin receives the qi of yangming, transmits into shaoyin, and too yin enters shaoyin, which is the second channel of the pivot. Shaoyin has been born, stimulate the release of yang, turn into the sun, and shaoyin into the sun, which is the third channel of the pivot. Therefore, shaoyin is the pivot of yin and yang, and the key way to regulate yin and yang. In the theory of yin, the three yin of the shaoyin and the main three yin are the pivot, which has the meaning of harmony and harmony. The author believes that from the perspective of the shaoyin kidney, we should first start from the overall perspective of the three yin, because the kidney plays the role of a bearing here, which must have the front axis, the back axis, from the perspective of the five elements, above the axis can be attributed to the taiyin spleen soil, the spleen is the official of the warehouse, the water valley is transformed into qi and blood, and then reaches the whole body through the transformation of the shaoyin center. Under the axis can be attributed to the shaoyin heart fire, the heart is the great lord of the five internal organs, "Xunzi Unmasked" chapter records: "The heart, the prince of the form, the lord of the gods, gives orders and receives no orders". "Huainanzi" records: "The heart is the master of the five internal organs, so he makes the limbs and popularizes the blood qi". The main master is conscious, and the main bone of the kidney, the essence is filled, and the consciousness of human thinking is also closely related. Therefore, the transmission of the shaoyin cardinal has an important impact on the changes of yin and yang in the human body.

2. Intellectual Disability

Intellectual disability (ID), also known as intellectual retardation or mental retardation, refers to mental development disorders manifested by deficit disorders in intelligence and adaptability, mostly occurring between 0 and 18 years old [6-7]. Due to the high incidence of the disease, about 1% ~ 3%, and the personal impact on the physical and mental health of the majority of children, and even the happiness index of family and society, in recent years, the world medicine for intellectual disability related research is increasing and deepening, especially in the treatment of traditional Chinese medicine [8]. This disease is equivalent to the five delay-language delay disease of traditional Chinese medicine, and the clinical characteristics are slow response, slow speech, sluggish expression, distracted mindlearning difficulties, social adaptability defects and self-care ability defects, as shown in Figure 3.



Figure 3. Children with ID

2.1. Etiology

2.1.1. Innate Factors

Kidney is the innate foundation, kidney essence, main reproduction, if the congenital parents are insufficient essence, the fetus is missing from the congenital essence, is congenital deficiency, so it is prone to diseases. The heart is the main mind, the liver is the main emotion, the kidney is the main essence, the essence, the medullary is filled with the brain, the growth and development of people and the brain need the nourishment of the essence in the kidney, if the congenital essence is insufficient, the medullary sea is not full, the medullary sea is insufficient then the brain is not nourished, and then cause intellectual disability, such intellectual disabilities are mostly caused by congenital factors.

2.1.2. Acquired factors

Kidney is the innate foundation, spleen is the acquired foundation, kidney acquired essence comes from the nourishment of the essence of the five organs, if the birth of malnutrition, weaknessfall damage to the brain, or difficult labor and abdomen at the time of delivery, will lead to acquired deficiency, the kidney hidden acquired essence is insufficient, and then cause delayed speech, as shown in Figure 4.

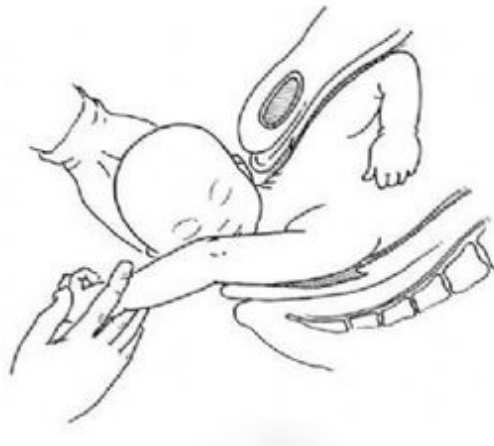


Figure 4. Birth trauma

2.2. Intellectual Disability, Liver and Kidney Deficiency Type

Intellectual disability is mainly due to insufficient kidney essence, sperm is not honored brain, brain loss of nourishment, and then lead to mental retardation, this disease is located in the brain, the brain is the house of the Yuanshen, from the essence qi metamorphosis, such as the meridians are not smooth, the brain pulp qi can not be exterior, it can cause low thinking, slow response, etc. [9], the main disease of the disease is the kidney, and the spleen is also closely related, the two organs are the innate foundation, the two are mutually beneficial, the spleen and stomach transport depends on the gasification of the kidney, the abundance of essence in the kidney also benefits from the subtle glory of the water valley, Liver and kidney deficiency intellectual disability is a common type of intellectual disability, mainly manifested as memory loss, slow response, blindness, difficulty in concentration, difficulty in self-control of limb activities, lack of consciousness, unhonorable hair, and accompanied by dry mouth and pharynx, dry eyes, slow movement, or thin muscles, late teeth, wide or closed fontanelle, pale or red tongue, less or no moss, weak pulse or

fine number [10]. Clinically, Zuogui Wan is used to treat liver and kidney deficiency intellectual disability, so as to nourish the liver and kidney, and strengthen the brain and intelligence.

3. Based on the Theory of "Opening and Closing the Pivot ", the Mechanism of Liver and Kidney Deficiency in the Treatment of Intellectual Development Disability was Analyzed

3.1. Shaoyin turning is unfavorable, and the Jueyin is Abnormal

As a whole, the connection between each part of the child is organic, and it is also necessary to always adhere to the basic feature of traditional Chinese medicine by opening and closing the center to demonstrate liver and kidney insufficiency intellectual disability, keeping in mind that starting from the whole to grasp the pathogenesis, intellectual disability is dominated by congenital factors [11]. Traditional Chinese medicine believes that the kidney is the innate foundation, among the five elements, the kidney is the mother of the liver, if the kidney qi is full, the liver qi is reached, "Suwen Five Running Theory" said: "The north gives birth to cold, cold and water, aquatic salty, salty kidney, kidney to bone marrow, and pulp to liver". The kidney mainly stores essence, nourishes the bone marrow, and gives birth to liver wood; The liver mainly stores blood, sperm can produce blood, blood can be refined and mutually transformed, that is, sperm blood is homologous. Therefore, Jueyin is closely related to Shaoyin, and Jueyin closure disorder and Shaoyin pivot is unfavorable, one lies in the lack of the source of Yin blood, the other lies in the blockage of the Yin blood transfusion channel [12], the two restrict each other and affect each other, and the dereliction of duty of either party will lead to the occurrence of the other party's disease, so the production of liver and kidney deficiency evidence is just like the operation of the human body's qi machine deviating from the law of opening and closing the center of three yin and three yang, which is always attributed to the unfavorable turning of the Shaoyin and the abnormality of the Jueyin and the decline [13]. We should accurately grasp the two key points of the disease in order to seek treatment.

3.2. Treatment of Intellectual Disability, Liver and Kidney Insufficiency

From the "opening and closing of the pivot" to discuss intellectual disability, liver and kidney insufficiency, it is necessary to focus on the two points of Shaoyin turning is unfavorable, and the Jueyin is abnormal. Zuogui Pill is from "Jingyue Quanshu Xinfang Eight Arrays", which is composed of prepared rehmannia root, yam, dogwood, deer antler glue, turtle plate glue, semen cuscatae, wolfberry, Sichuan ox knee, which has the effect of nourishing kidney yin and filling the lean pith, and is a representative of the treatment of true yin deficiency [14]. Rehmannia was first published in the Shennong Materia Medica, listed as the top grade, and is one of the famous "Four Great Huai Medicines". Rehmannia returns to the heart, liver, kidney meridian, cold, sweet, bitter, can nourish yin and tonify kidney [15]. After being steamed and dried for a long time, it plays a warming role in kidney yang, and radix rehmannia prepartate is conducive to replenishing Shaoyin transfer disorder. The "Compendium of Materia Medica" also lists yam as the top grade, which is also one of the "Four Great Huai Medicines". Return to the spleen, lungs, kidneys, sexual sweetness, flat. It can nourish the spleen and stomach, nourish the lungs, and nourish the kidney and astringency [16]. The two drugs work together to help Shaoyin to reach the opportunity of transfer. "Bencao Chongyuan" puts forward: "dogwood salty wood fire qi. Temperament, so the Lord is warm to spleen and stomach ". Dogwood, returning to the liver meridian, can avoid the abnormality of the Jueyin, so that the liver blood is filled without stasis, loose but not leaked. Turtle plate gum and deer antler gum are both flesh and blood products, nourishing the liver and kidney yin essence, and undertaking the close connection between Shaoyin and Jueyin. Regarding wolfberry,

the "Materia Medica" once recorded: "Enter the foot Shaoyin, the foot Jueyin meridian". It is a product that nourishes the liver and kidney, which is peaceful properties. Fangzhong drugs are treated from the liver and kidney, aiming to restore the function of "opening and closing the pivot" in the three yin, and the drugs in Zuogui Wan assist each other, which is a classic prescription for the treatment of intellectual disability liver and kidney insufficiency, as shown in Figure 5.



Figure 5. Selected medicinal herbs

4. Conclusion

In short, grasping the relationship theory of three yin and three yang "opening and closing the pivot" from the operation of the internal organ gas machine has very important clinical guidance significance for the treatment of intellectual disability liver and kidney insufficiency. From the theory of "opening and closing pivot", the pathogenesis of intellectual disability liver and kidney insufficiency is Shaoyin turning is unfavorable, and the Jueyin is abnormal, treatment should grasp the overall pathogenesis at the same time, adhere to the overall thinking and overall concept, in order to restore the normal mechanism of three yin and three yang "opening and closing pivot", Shaoyin turning has a degree, and the Jueyin can be closed, so that the yin and yang can be peaceful, the sperm blood is sufficient, and the intellectual disability liver and kidney insufficiency type can be cured.

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Data Availability

The datasets used during the current study are available from the corresponding author on reasonable request.

Conflict of Interest

The author states that this article has no conflict of interest.

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