

Exploring the Mechanism of Umbilical Moxibustion on Improving Spastic Cerebral Palsy of Liver Strong Spleen Weak Type Based on the Theory of "Intestinal Liver Axis"

Junxiu Yang¹, Hui Wang^{2,*}

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

²*Xi'an Hospital of Traditional Chinese Medicine Encephalopathy, Xi'an, Shaanxi, 710068
China*

**Corresponding Author*

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Abstract: This paper introduces the "brain - im axis" "im - liver shaft" relevant theories as well as cerebral palsy related zang-fu organs, also illuminates the umbilical acupuncture treatment principle and effect mechanism. To explore the umbilical moxibustion improve strong liver and spleen weak type cerebral palsy of spastic type mechanism, broaden the train of thought for clinical practice and research.

1. Introduction

Cerebral palsy is due to genetic, premature birth, congenital malformation, perinatal period, intrapartum infection, which is a persistent central dyskinesia and a group of syndrome that movement and posture dysplasia, reflective dysplasia abnormal muscle tone and strength. Cerebral palsy in movement disorders, and accompanied by feeling, cognition, communication, perception, behavior and other anomalies and seizures, also has a secondary musculoskeletal system, mainly in terms of movement function, is the same age children's motor development lag behind and abnormal behavior [1]. The cause of pediatric cerebral palsy is unclear, the universal brain damage and developmental defect for the direct causes of cerebral palsy, it is one of the main symptoms of children with disabilities. The onset of cerebral palsy rate at about 0.248%, prevalence of about 0.246% [2]. Incidence of cerebral palsy in the highest type of spasm type cerebral palsy, the largest number, about 60% - 70% of total pediatric cerebral palsy, in addition to this, in traditional Chinese medicine syndrome differentiation are strong liver and spleen weak card [3].

With the rapid development of severe among medical and newborn children, and the economic level gradually improve, low quality of neonatal mortality decline year by year. But the incidence of pediatric cerebral palsy also presents the rise year by year, not only brought children with physical and mental pain, back to the family, has brought the serious mental pressure and to the society.

And the theory of im - liver shaft [4] the discovery and development of treatment to us strong liver and spleen weak type infantile spasm type cerebral palsy with related research foundation of modern medicine, meanwhile, it features of traditional Chinese medicine (TCM) combined with

umbilical acupuncture treatment for our strong liver and spleen weak type infantile spasm type cerebral palsy provide open thought and novel treatments. Based on the theory of "gut - liver axis", the strong umbilical moxibustion improve liver spleen weak type infantile spasm type related to explore the mechanism of action of cerebral palsy.

2. Disease of TCM New Source

The name of disease, cerebral palsy in TCM ancient books there is no clear records, belong to the modern medicine of disease, but its existence and records have been according to the test. Children with cerebral palsy in the traditional medicine of traditional Chinese medicine (TCM) shall vest in the "five late", "five soft" and "five hard" concepts such as category. "Five late" refers to the set up late, line late, hair late, tooth late, language late. "Five soft" refers to the head soft, hand soft, foot soft, mouth soft, muscle soft. "Five hard" refers to the head hard, hand hard, foot hard, mouth hard, muscle hard. Can alone, between and among can co-exist at the same time. The disease dates back to the eastern han dynasty in the cranial the anterior fontanelle step line "late". After sui dynasty nest yuan fang in the various pathogenic waiting on all pediatric miscellaneous disease syndrome, "said in" teeth long life, "a few years old can't line", "four or five years old can't words also. These reflects the doctor began to such diseases have a certain understanding. Late song dynasty period, late pattern of syndrome and soft pattern of syndrome be mentioned in the same breath. The pediatric health chief micro theory, volume 2, 5 gas theory recorded to "language late, line late, muscle desert, solution of craniall". "Five new baby book", in addition to "five soft", also illustrates the related performance of "five hard" for example:" five died, hardness cry without tears, head hard, hand hard, foot hard, back hard". Yuan dynasty doctor Zeng Shirong "live young heart book five soft" in understanding for "...Essence is not filled, the physique weak expression paralysis, muscle virtual thin, look out slowly, just for the six evils of the assault, then head to foot and body soft, is the five soft". Ming of the infant child best asked, volume 3, five soft"application" five soft" and familiar with five soft the cause of the "wind disease after soft". Pointed out that "Five soft refers to the head soft, hand soft, foot soft, mouth soft, muscle soft. "Development in qing dynasty, doctor zhang in" the zhang medical sense, volume 12, five late five hard five soft" defined as "Five late refers to the set up late, line late, hair late, tooth late, language late."Late that later generations of physicians, calling likes these to describe such conditions, and in use today.

2.1 Etiology and Pathogenesis Discussed

2.1.1 Etiology and Pathogenesis of Traditional Chinese Medicine

Two aspects can be divided into by TCM: congenital cause and acquired cause.

Congenital factors due to insufficient endowment, included hypotrophic lacked of nutrition, frightened, and so on. In Ming dynasty, "the young families play, one of volume, womb disease" thoughted" Bone soft...a soft, head, hand, foot and weak impotent, teeth not neat, not black, sitting, walking needs help and support, and are lack of tire is very inadequate. "Zeng Shirong[5] to summarize such view, also think "has a mother blood long cold, strong medication for pregnancy; a sick pregnant; or his father lewd wine, gas, weak; or very old with children; lack of the living; or take the abortion of agent and have pregnant. "Parents which are insufficient JingXie to hypotrophic lacked of nutrition. The father have losses to SuiHai empty. Female blood deficiency is not moisten to heart, cerebrovascular damage, obsessed with the brain is veiled, constant, kidney essence. The YiZong Jin Jian young families use gist interpretation of the etiology of "congenital have losses due to the weakness of qi and blood, of parents. "Qing dynasty Chen Fuzheng [6] also made it clear that in the new baby integration "Children born after, there are five soft five hard evidence, is the tire

yuan of weakness, and often suffer congenital sun be the spirit not to charge, combined with qi and blood is insufficient, can moisten the limbs, relative loss. Long qi and blood stasis, the relative expression paralysis soft without or JuLuan stiff cannot."

More than the day after tomorrow factor because alongwith the day after tomorrow, intrapartum by the wind, the six evils of the exogenous, long illness, one of a serious illness caused by LiangYao, lack of milk...Such as the acknowledgement of Ming dynasty solution in the piece of jade heart book records for"One LiangYao soft after a serious illness, and soft. "In the Ming dynasty Zhang Chang "infantile the card addendum" talked" Once the six evils of the dip, then head to foot and body soft, is a five soft."During the period of the republic of China Chen Shouzheng [7] the extraction essence of pediatrics recored that "Because of a serious illness or after a long illness, suddenly see soft head items." And so on. Alongwith the day after tomorrow, the essence is not filled, preserving the owner, long five zang-organs is deficient, deficiency of qi and blood, dysfunctional, subtle material can't reach on the limbs, leded muscle impotent weak, joint, flexion and unable or not, cannot stand alone, alone, growing bone deformities.

2.1.2 Western Medicine Etiology and Pathogenesis

Research shows that both at home and abroad, the middle of a pregnancy to 18 months after birth, especially 8 months after birth, is a key period of the human brain development [8].China (2022) of cerebral palsy rehabilitation guide will be common risk factors of cerebral palsy is summarized as premature birth, asphyxia, fetal distress, low birth weight, high bilirubin hematic disease, cerebral palsy of pathological changes mainly include cerebral white matter, brain dysplasia, cranial injury. Gestation period, is generally believed that genetic is disease-causing culprits. Birth trauma and neonatal asphyxia to produce the main pathogenic factors. Postpartum more lost by the day after tomorrow in the aftercare, trauma, drug factors such as disease [9].

2.2 Weak to Strong Liver and Spleen of TCM Syndrome Type Spasm of Cerebral Palsy

Spastic type cerebral palsy belongs to the strong liver and spleen of TCM symptoms more weak card [10].Liver storing blood, advocate muscle, liver body Yin and Yang; Spleen blood system, main muscles, main litres of qing dynasty, the main transport and production of body fluid. Its pathogenesis or because of excessive diseases with , wood by spleen earth, liver and blood biochemical , spent sources. Instead aggravating liver storing blood and regulating the function of blood disorders, body functioning, qi-blood alongwith, muscle is not filled, limb tendon contracture, shut. Or due to spleen deficiency, water does not contain the wood, not inhibit liver wood cause liver relative KangSheng channels and muscle to lose water to moisten the subtle substances lost China, hence to alongwith the muscle, bones and muscles JuLuan, form the abnormal body.

3. Methodology

3.1"Brain - Im Axis" Theory

The brain as a "sea of pulp", intestinal referred to as "the second human brain"."Brain for clear spirit of the house, and not have diarrhoea.E. the officer of conduction, diarrhea and not hidden, both hidden xie moderately, spirit is in." Brain gut axis theory of modern medicine [11] that there is a two-way adjustment between brain and intestine channel, the brain and intestine, bowel disease and brain. Brain gut axis contact mainly through three channels: neuroendocrine pathways, immune pathways, metabolic pathways. Involving the central nervous system, endocrine system, the enteric nervous system and autonomic nervous system, the vagus nerve, and the immune system. The gut

microbes play an important role in the channel, reduce inflammation, enhance immunity, regulating HPA axis, increase neurotransmitters. Thus affect the growth and development of the central nervous system neurons and the hypothalamus and amygdala brain functioning of the organization. On the other hand, the brain can be affected by the hypothalamus - pituitary - adrenal axis of intestinal function and state of the existence of the intestinal flora, change the body's physiological pathology.

3.2 "Im - Liver Axis" Theory

Theory of "liver with e." first in the Ming dynasty Li Ting, introduction to medicine viscera are interlinked," citing anonymous original theory of "the theory of five viscera create": "liver with e....lung and bladder are interlinked...Kidney with live."Lee's solution injection way: "ill liver appropriate dredge the large intestine, large intestine smooth liver meridian." "Enterohepatic axis" theory in modern medicine [12] first in 1998, put forward by pathological physiologist Marshall. This paper gives the liver and intestinal system via the portal vein, bile duct and between systemic process of two-way communication. From the perspective of modern medicine analysis the relationship between the liver and intestinal anatomical location and contact physiology, pathology, also for the TCM theory of "liver and colon are interlinked" provides an objective basis. Liver by biliary bile from the bile salt and IgA antibacterial molecules to the lumen, affect the number and composition of gut bacteria, control bacteria. And bile salt may be passed to the liver, such as FXR receptor regulate the liver bile acid synthesis and glucose metabolism, lipid metabolism, etc. Liver can also be toxic substances in catabolism and acetaldehyde, butyric acid, etc by systemic metabolic product delivery to intestinal education body outside, and can prevent the generation of bacteria. Gut can with the aid of the portal vein system, while provide nearly 75% of liver blood supply nutrients, gut microbes and their metabolic products, such as lipopolysaccharide, peptidoglycan and bacterial DNA, shift to the liver, to participate in the metabolism of the liver immune.

3.3 The Connection between the Brain, Liver, Spleen and Intestine

The disease of the pivot, the evil hide wrote: twelve meridians, three hundred and sixty-five, its flesh is upward to the face that empty cases. So the whole body by leading empty know-how linked to brain directly or indirectly, to the brain, liver, spleen and intestine of four material exchange through the meridian system subtle laid the foundation [13].Liver factor, homophonic factors, if found in modern, liver, can cause poor spleen and stomach qi activity, di qi activity stasis, choking and easy to cause bloating, the new full, constipation and so on spleen and stomach bowel disorders. Depression, dementia, insomnia, epilepsy, Parkinson's disease and other diseases of the central nervous system development and the close relationship between the liver, such as liver blood deficiency, moving inside, liver Yang syndrome etc. These diseases clinical often accompanied by loss of appetite, poor transport, such as relieving gas barrier performance."Im brain - axis", therefore, confirms the theory "im - liver axis" brain, liver, and spleen, intestines four have mutual influence between the closely linked.Based on the theory of encephalopathy cure intestinal treatment strong liver and spleen relevant basis was provided for the weak type cerebral palsy, expand the clinical thinking.

4. Umbilical Acupuncture Treatment Principle and Effect Mechanism

Cerebral palsy the etiology of congenital kidney deficiency, spleen and stomach weak precipitating factor for the day after tomorrow. Strong liver and spleen weak type cerebral palsy is a disease in the brain, but associated with liver, spleen, kidney, sexual disease belongs to this virtual

reality. Kidney officer as a strong, fine, the bone marrow, so the kidney, and medullary sea foot filling, as usual. Liver storing blood, and the main reinforcement, if the move is insufficient, the ribs detained, if diseases with KangSheng, wood by spleen earth, onyx not glory. Spleen officer for the storage, the main muscle limbs, temper health migration and the muscles and joints. So if the brain, liver, spleen, kidney deficiency, then there will be a "five late" state. Treatment of strong liver and spleen weak type cerebral palsy with antimicrobial wood upon earth as a basic principle.

Umbilical moxibustion is the key to adjust vitality. "Difficult, by sixty-six, difficult" load: "between kidney under the navel should become angry, life also, 12 after the foundation of, also called the original. And has repeatedly pointed out in the "difficult", "The gate of vitality, located under the navel to vigour, gathering place [14]. So the umbilical acupuncture has tonic vigour, removing yuan Yang effect. Congenital qi, im by the essence in kidney, its main function is to promote the growth and development of the human body, and WenXuHe inspire the zang-fu organs, meridians and other organizations. It is to maintain life activities of the human body is the most basic material, is the driving force of life. So the adjustable feet, make up for congenital deficiency, alongwith the day after tomorrow, kidney and brain, tonifying spleen liver. Strange through eight veins test load: "the sanjiao (triple energizer) is the curse, and blunt, ren and du are interlinked, so attached to this." So it can be adjusted through the pathway of the sanjiao (triple energizer) five zang-organs. Umbilical moxibustion effect, special areas located in CV 8 point, CV 8 ren meridian. Pivot meridians recorded: "Ren meridian, called the tail. The dovetail, scattered in the abdomen. "Ren meridian courses in front, the trunk in the abdomen, on the anatomical structure, its many meridian attached directly to the intestines and stomach. Such as guan yuan, shek mun, such as deep as the small intestine, the extremely deep for sigmoid colon, chung wan deep for gastric pylorus. So the umbilical acupuncture direct effects on the gut, through the "brain - im axis", "im - liver axis" to intervene in the cerebral palsy physiological pathology.

5. Conclusion

Is the so-called "disease under the elect, treat it underneath." Yu are common liver, the spleen is often insufficient. The method from medical Angle liver advocate muscle storage and movement function of regulating body blood body channels joint to nutrients nourish the liver. Liver Yin blood loss too liver Yang rising without making Yang into the wind virtual wind moving inside the channels JuLuan, convulsions, adverse joint flexion and extension. The postnatal spleen main limbs muscle for is the source of qi and blood biochemical. Temper weak water subtle transport adverse can moisten the limb muscles will see limbs muscle weakness Withers flexion and extension can not stand alone. Liver wood KangSheng cut spleen and blood biochemical soil lack source channels and the muscles and muscle to lose blood moisten soft weak channels twin acute, convulsions. The disease is in the brain, but is closely related to the heart, liver, spleen and kidney. Including congenital kidney deficiency, spleen and stomach weak precipitating factor for the day after tomorrow. Apart from the above disease because of "virtual", or phlegm dampness, blood stasis block, can also be sent to the disease. So has the acknowledgement, from the perspective of the factors, found in the brain and blood stasis resistance, phlegmy wet in Inner Mongolia, or exogenous pathogenic toxin etc, on the basis of qi and blood and Yin and Yang deficiency has become a brain.

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