

# *Research Progress of Acupoint Application Therapy in Cerebral Palsy Based on Ancient and Modern Literature*

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**Abstract:** Cerebral palsy, is a progressive brain damage due to various reasons syndrome, main show is congenital movement disorders and pose obstacles, is a common central nervous system dysfunction syndrome of infantile period, pathological changes in the brain, often before birth, around the time of birth and after birth, disease involving the limbs, often accompanied by mental retardation, Behavioral disorders, audio-visual disorders, epilepsy and other abnormalities [1]. In traditional Chinese medicine, cerebral palsy is classified into the categories of "five late", "five soft", "five hard", and so on. There are many causes of cerebral palsy, and its pathogenesis is congenital deficiency and postnatal loss. Studies have shown that the incidence of cerebral palsy is 2.22% ~ 2.9% in developed countries and 2.7% ~ 2.9% in low-income countries, while the incidence of cerebral palsy in China is 1.29% ~ 5.06% [2]. In traditional Chinese medicine (TCM) treatment, acupoint application is relatively quick, simple and safe, which can make up for the deficiency of internal medicine treatment. Therefore, it is widely used in ancient and modern clinical practice, and is also widely used in cerebral palsy diseases. This paper summarizes the research progress and analysis of acupoint application therapy in the treatment of cerebral palsy patients in ancient and modern times, and provides a more convenient and feasible treatment method and new ideas for the rehabilitation treatment of cerebral palsy patients.

## **1. Introduction**

In recent years, the medical security of newborns has been improved, and the mortality of newborns has decreased, but the incidence of cerebral palsy in children may be on the rise, which has brought great psychological and experience pressure and social burden to the society and family. The etiology of cerebral palsy is complex, and there is no specific drug or extremely effective method to treat cerebral palsy so far [3]. At present, the treatment of cerebral palsy is mainly comprehensive treatment, using modern rehabilitation therapy and western medicine, combined with acupuncture, massage and traditional Chinese medicine or surgical therapy - spinalnerve root amputation (SPR) [4]. In order to achieve not only restore the physical function of children, but also to children's mental, psychological, social and other levels of treatment, prolong the life of children, improve the ability of independent survival and future work ability of children. In the treatment of traditional Chinese medicine, Chinese medicine acupuncture attach application is very extensive in the ancient and modern clinical, contains the respiratory system diseases such as cough, asthma,

digestive system diseases such as spleen and stomach disease, intestinal disorders, urinary system diseases, such as the bladder disease, constipation, etc., excessive activity of the nervous system diseases such as cervical spondylosis of nerve root type, such as cerebral hemorrhage recovery, Diseases such as rhinitis, pharyngitis, gynecological and pediatric diseases, in addition to cancer and other diseases. The reason for its extensive treatment is the dual effect of acupoints and traditional Chinese medicine treatment. It is a non-invasive therapy, and the drug can be transmitted directly to the disease center with the transmission of acupoints and meridians, and the curative effect is considerable. In recent years, acupoint application therapy has also been widely used in cerebral palsy. The following describes the research progress of acupoint application on cerebral palsy patients in ancient and modern times, so as to provide more simple and effective methods for the rehabilitation treatment of cerebral palsy patients.

## 2. Research progress of acupoint application in ancient cerebral palsy

Acupoint application has a long history. It has the popular nicknames of "heavenly moxibustion" and "self-moxibustion". It is a kind of treatment method of traditional Chinese medicine, which was first recorded in the book "Acupuncture and Moxibustion Zisheng Jing", Its theoretical basis began as the "Li Yue Parallel Wen" [5], which argued that "external governance must be paralleled by internal governance, seeking its origin first. This what? Ming Yin and Yang, know viscera also..... Although governing outside, no special governing inside also..... So with internal governance parallel, and can complement the internal governance of the less than, this also." "The principle of external treatment is the principle of internal treatment, the medicine of external treatment is the medicine of internal treatment, the difference is the method ear". For the first time, the theory of external treatment and internal treatment is the same, the internal treatment of drugs can also be used externally, the concept of treatment is also the same, through the treatment system of syndrome differentiation, the right prescription is given outside, the difference between the two is only the way of administration. This book influenced the doctors of later generations to broaden their thinking of treating diseases, and laid the foundation for the development of acupoint application therapy. Acupoint application by blending traditional Chinese medicine or dry foam applied to the human body acupoints, through the absorption of the skin to the drug and the adjustment of meridians to the body, to prevent and treat diseases. "Huangdi Neijing" (Yellow Emperor Neijing) is a theoretical foundation work of traditional Chinese medicine. It is recorded in "Lingshu Jingjin" [6] that "the tendon of foot Yangming..... Urgent eye discord, hot tendon longitudinal, eye is not open, buccal tendon cold, is urgent, buccal mouth. There is heat, tendons longitudinal, slow, withdrawn. To treat the horse ointment, ointment its urgent; With white wine and cinnamon, to paint its slow..." In the book, detailed records of acupuncture, ironing, plaster and other external treatment methods, set a precedent for the use of plaster. Works such as "Qianjin Fang" and "Wai Tai Mi Yao" in the Tang Dynasty also recorded the treatment of various clinical diseases with many external creams and pastes [7] Some works in the Ming and Qing dynasties also improved the clinical role of the application therapy in various departments, and there were similar records of the application therapy with five late, five soft and five hard patients. It was mostly used to solve the cranial and fontanelle depression in neonatal diseases, and the application site was mostly located in the fontanelle acupoint. Cranial solution [8] often use milk, ginger juice, pig buccal car pulp, pig bile, jizi Qing and other reconciling agents adjusting compress or dry end direct compress, Fontanelle depression [9] Use adjusting compress or dry end directly, such as scallion soup and ginger juice adjusting compress. To make the effect of external acupoint application therapy better, most of the drugs are fragrant drugs with strong odor, and most of them are fierce drugs. The drug odor is used to stimulate the skin acupoints, and the effect of dredging the channels

and collaterals through the acupoints, so that the effect can be played, so as to regulate the balance of Yin and Yang of viscera and achieve the purpose of treatment. Ancient acupoints are selective, such as God que, Yongquan, fontanelle and other special acupoints, there are also Baihui, temples, etc. And the application of drugs are mostly Xinwen aromatic class, basically use aconite, aconite, Arhinacea, ginger, scallion, musk and so on, so that its properties are better.

### 3. Research progress of acupoint application in modern cerebral palsy

Based on a large number of ancient works on acupoint application, modern acupoint application has a wider range of treatment, and the clinical effect has been further improved. Diseases used in modern acupoint application include respiratory system, digestive system, urinary system, nervous system, pediatric, gynecological, nasopharyngeal and oral diseases and cancer, etc. Modern acupoint application therapy has also been used in the treatment of cerebral palsy, which plays the purpose of fuzheng and dispelling evil, balancing Yin and Yang, adjusting Qi and blood, and dredging qi machine in the recovery period of spastic cerebral palsy patients. At the same time, by adjusting the immune function system, the disease resistance can be improved, the incidence of common respiratory and gastrointestinal infections in patients with cerebral palsy can be reduced, the course of disease can be shortened, the rehabilitation treatment of patients with cerebral palsy can be assisted more quickly, and the comprehensive rehabilitation effect can be improved.

Tan Xiao Ru [10] in the pediatric cerebral palsy acupuncture point stick experiments that the acupuncture point to treat, and response to disease in the body, it has two-way adjustment function, medicine medicinal properties and the effect on the treatment of diseases through longer adhesion in the aperture or to release the physical and chemical drug into the human body each disease areas and produce bidirectional regulation as a whole. All kinds of acupoints on the human body are the place where qi and blood condense in the viscera, so they have their own unique functions. In this paper, the author used clinical control experiment, in which the treatment group of acupoint sticking use prescription, including clove, wood, dog, cinnamon and other symptomatic treatment drugs, honey into paste, paste, according to the dialectical syndrome type to take different points, or according to different clinical manifestations, etc. After statistical analysis shows that the treatment group using acupuncture applied after treatment effect is greater than the control group, acupuncture points were applied in different meridians exert its curative effect, has tonic and WenTong, improve immune system of children etc, fully illustrates the traditional Chinese medicine acupuncture points were applied to infantile spasm type cerebral palsy has good treatment effect, can improve cerebral palsy treatment continuously, children improve resistance. Professor Yang Jun [11] attaches importance to syndrome differentiation and treatment in the treatment of cerebral palsy, and believes that the drugs used for acupoint application should be added or subtraction flexibly, but borneol and asarum must be used. Borneol belongs to the dragon brain, volatile, slightly cold, bitter taste, into the heart, lung, spleen meridian, has the ability to pass all orifice, but also can lead up. Asarum into the heart meridian, warm, can treat headache, can also dispel wind and cold, Yang Shi selected Shenque and Baihui two points for acupoint application, this two points can effectively import drug absorption, the effect is better. Under the accumulation of a lot of clinical experience, Dr. Yang proved that acupoint application is indispensable in the treatment of children with cerebral palsy, and clinically recommended to be widely used. Children with deficiency of the five zang organs, low immunity, lung, spleen and stomach and other viscera development is not enough, prone to disease, climate change is easy to induce lung diseases, such as cough, cough and asthma, children with cerebral palsy compared with normal children, the foundation is worse and more prone to disease. Yu-xiu li [12] to realize modern such as cerebral palsy children with exogenous cough disease is another matter, found that the acupoint sticking to its play an important role, the

grouping of clinical study, the control group given antibiotics, atomization inhalation, back row of phlegm, suit the support treatment, such as conventional treatment, observation group used together on the basis of the lung by acupoint sticking therapy, the experimental results, real and effective It is proved that acupoint application has an important role in the treatment of cough in children with spastic cerebral palsy. It is simple and effective in clinical practice, and should be popularized and used. FeiYan [13] with specific drugs: north apricot asarum powder were applied in bilateral lungs, shan of shenshu point acupuncture point and tian tu, this post apply of the formulas for north apricot and asarum, both by 2:1 ratio after mixing grinding into powder sticking, the experimental results show that the acupoint sticking down can promote lung qi, which can effectively reduce the children with cough and prevention of lung disease. TCM holds that cerebral palsy with inadequate natural endowment, alongwith the day after tomorrow for the cause, the spleen is the foundation of the day after tomorrow, so the children with cerebral palsy who pixu (spleen deficient) is more, Tan Xiao Ru [14], such as clinical type collecting pixu (spleen deficient) for children with cerebral palsy to knead ridge therapy acupoint sticking therapy, the results showed that knead ridge with spleen deficiency acupoint sticking therapy of cerebral palsy obvious effect, worth clinical popularizing to use. Cerebral palsy parting, the most common types of convulsion, its prevalence rate was 60% - 70% [15], in addition also has a part of the children with low muscle tone type cerebral palsy, most children with the type of double lower limbs weakness, there is little or not standing and walking, directly affects the quality of life of children, at present for the treatment of children clinical curative effect is poorer, Qiao cheng [16] found that such children with poor clinical treatment, and less cases, thus collected nearly two years of low muscle tone type cerebral palsy and explore the effective treatment method, firewood into low muscle tone type cerebral palsy of double lower limbs weakness due to congenital kidney deficiency, poor growth and development, and spleen alongwith the day after tomorrow, the spleen as a source of biochemical, so the source of qi and blood biochemical spent, Spleen main body muscles and bones, so the whole body is weak. Therefore, strengthening the spleen and tonifying the kidney is the best plan for the treatment of this type of cerebral palsy, so the spleen, stomach and kidney meridian points are mainly selected in the treatment of Chinese medicine. Studies have shown that electroacupuncture combined with acupoint application has a satisfactory clinical effect on the treatment of children with cerebral palsy, which can improve the clinical rehabilitation effect of children, improve the quality of life and learning of children as soon as possible, so as to reduce the burden of family.

Acupoint application not only has good effect on the treatment of cerebral palsy in children, but also has obvious effect on the treatment of cerebral palsy in adults. The immunity of adult cerebral palsy patients is poor, and it is easy to induce recurrent respiratory tract infection during clinical hospitalization. The general treatment drug is splenic aminopeptin oral lyophilized powder, which has a general effect. Exploring other treatments is a major problem to be solved urgently in clinical practice. Lin Zhuoting et al. [17], in exploring effective prevention and treatment methods for recurrent respiratory tract infections in patients with cerebral palsy, believed that acupoint application combined with oral lyophilized spleen aminopeptide in the treatment of recurrent respiratory tract infections in patients with cerebral palsy had better clinical efficacy than oral lyophilized spleen aminopeptide alone, which could better improve recurrent respiratory tract infections in patients with cerebral palsy. And improve the patients' immune function, reduce the hospital stay in patients with cerebral palsy incidence of hospital infection and improve the patients' recovery rate, in a word, clinical studies suggest acupoint sticking can effective prevention and treatment of cerebral palsy patients with repeated respiratory infection, improve patient's immunity, and characteristic for non-invasive, easy operation, no adverse reactions, worthy of clinical application. In addition, due to the poor immune function of cerebral palsy patients, Li Yuxiu et al. made Fangfeng Baizhu powder and applied it to Zusanli, Pishu and Feishu on both sides of patients.

The results showed that this method effectively improved the immune function of cerebral palsy patients. [18]

#### 4. Conclusion

With the development of society and medical career, the treatment methods for cerebral palsy patients are increasingly advanced, and traditional Chinese medicine also plays an indispensable role in this disease. In recent years, in addition to traditional Chinese medicine and acupuncture and massage, acupoint application therapy has gradually entered our field of vision. The theory and experience of acupoint application for cerebral palsy have been accumulated since ancient times, and modern medicine has discovered more treatment methods for cerebral palsy patients based on the experience of ancient people. Acupoint application of Chinese medicine is to make paste and paste of Chinese medicine powder, make a patch and apply it to the acupoints required by the disease. Its efficacy lies in the external application through the skin, and the drug goes directly to the disease site under the action of the acupoints and meridians, without the first passing effect of the stomach and digestive tract in the process, thus improving the bioavailability of the drug [19]. Therefore, the effective absorption of drugs along with the meridians and acupoints will play the medicinal property to all parts of the body, to achieve the role of tonifying, dredging, regulating qi and blood, adjusting Yin and Yang, is a very important external treatment of traditional Chinese medicine. Now there are more acupoint application therapy for winter disease and summer treatment, which can also be used in the treatment of cerebral palsy patients. It is believed that there will be more effective treatment methods for cerebral palsy in the future, and more TCM treatment methods for cerebral palsy patients will be discovered, so as to improve the quality of life and work ability of cerebral palsy patients to a greater extent, and reduce the burden on families and society.

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