

Study on the Application of Bupleurum Decoctions in Pediatrics in Treatise on Febrile Diseases

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Abstract: *Xiaochaihu decoction and its related prescriptions are the core of Shaoyang disease in Treatise on Febrile Diseases. The children's "Yin and Yang" body and "pure Yang body" are in line with the "Shaoyang theory", and Xiaochaihu decoction and its formulas have been applied in pediatric diseases and achieved good results. The application progress of Bupleurum Decoctions in the treatment of pediatric diseases in Treatise on Febrile Diseases is summarized as follows.*

Keywords: Radix bupleuri, Bupleurum decoctions, Paediatrics, Review.

1. Introduction

Medical sage Zhang Zhongjing based on the Huangdi Neijing "Shaoyang as the hub" has the characteristics of communication inside and outside the upper and lower, access to the viscera three jiao, the establishment of small Chaihu decoction and its related prescriptions with Bupleurum as the royal medicine, in order to reconcile Shaoyang, to reach the cardinal, so as to achieve Yin Pingyang secret state. Ke Yunbo called Xiaochaihu decoction "the prescription of Shaoyang Cardinal Shaoyang, and the general prescription of reconciliation between the outside and the inside" in his general Treatise on Typhoid Fever with Wings. You Zaijing also said in "Typhoid Guan Zhu Collection": "Only the little Bupleuri side, reconciling the exterior, is the method of Shaoyang's correct treatment" [1,2]. Bupleurum decoctions mainly includes Xiaochaihu decoction, Dachaihu decoction, Chaihu Guizhi decoction, Chaihu Guizhi Ganjiang decoction and Chaihu Jialonggu oyster decoction.

Traditional Chinese medicine believes that children belong to the body of "Yin and Yang", on the one hand, the viscera are delicate, the shape of qi is not full, in line with the characteristics of "Shaoyang", on the other hand, it is vigorous, and the sex is happy and cathartic, which is similar to the sex of Shaoyang. Therefore, the body of "young Yin and young Yang" and "pure Yang body" can be combined into "little Yang body" [3]. Physiologically, liver is often surplus, lung is often insufficient, spleen is often insufficient. Pathologically, children are often susceptible to external evil, and change rapidly, easy to vacuity and easy to be solid, and form a pathological state of half surface and half inside, deficiency and solid inclusion. Therefore, pediatric diseases, from Shaoyang treatment is an important direction. Bupleurum decoctions in Treatise on Febrile Diseases has the function of reconciling Shaoyang, dredging inside and outside and regulating the whole body qi [4,5]. The application of bupleurum decoctions in pediatrics in Febrile Disease is summarized as follows.

2. Application of Bupleurum Decoctions in Pediatrics and

2.1 Respiratory System

Wind evil is the long of all diseases, and the external feeling is mostly wind evil mixed with other evil. "Plain question · Taiyin-Yang Ming Theory" cloud "injured in the wind, the first to receive", the lung is the "canopy" of the viscera, in the body to the fur, outside through the mouth and nose, so the external sense of evil first hurt the lung system. Children delicate organs, lungs are often insufficient, so children are most susceptible to external evil, and damage the lung system. At the same time, the child's body is "pure Yang", and the external evil is easy to heat from Yang, from the outside to the inside, forming a pathological state of half the surface and half the inside. Cough is the most common respiratory symptom [6]. "On Cough" cloud: "The five viscera and six organs are cough, not only lung." "Treatise on Febrile Diseases" also contains common respiratory symptoms such as "or cough" in Shaoyang. Shaoyang is the hub of qi, external and internal injuries may cause the cardinal to be unfavorable, so that qi is not smooth, resulting in lung loss, cough and other respiratory symptoms. Therefore, bupleurum decoctions can reconcile Shaoyang, dredge qi, regulate the heart, and can be used for multiple stages of respiratory diseases. Tuoyueling [7] used small bupleurum decoction to treat children's nighttime cough, and the results showed that 68 cases were cured, 18 cases were effective, 6 cases were effective, and 8 cases were ineffective, with a total effective rate of 92%, which greatly alleviated the symptoms of children. Zhang Guohai [8] treated acute suppurative tonsillitis and acute bronchitis with Dasaihu decoction as the main prescription, which not only treated the symptoms of children, but also reduced the utilization rate of antibiotics. Wang Juan [9] used Chaihu Guizhi Decoction to treat 30 cases of recurrent respiratory tract infection compared with Western medicine. The results showed that the total effective rate of Chaihu Guizhi Decoction treatment group was 93.3% higher than that of Western medicine control group 70.0% ($P < 0.05$). Chaihu Guizhi Decoction was superior to Western medicine treatment group in improving symptoms and signs. The T cell subsets and immunoglobulins were also significantly improved ($P < 0.05$). Zhang Baoqing [10] believed that adenoid hypertrophy complicated with chronic tonsillitis was a mixture of cold and heat in children, gallbladder heat and spleen cold, and Chaihu Guizhi Decoction was used as the main prescription to clear Shaoyang heat, warm Taiyin spleen cold, and then to treat adenoid hypertrophy

complicated with chronic tonsillitis.

2.2 Digestive System

"Baby family secret" cloud "children's spleen is often insufficient, non-adults comparable. Young and ignorant, the mouth is greedy, parents love, even if its desire, is the spleen and stomach disease, as much as adults." Children's spleen is often insufficient, easy to make the external sense of the qi machine is not smooth or hurt in the diet resulting in spleen loss, qi machine block, diet stop, the formation of external and internal disease or the pathological state of deficiency and accumulation. "Treatise on Febrile Diseases" recorded the symptoms of bupleurum decoctions such as "not wanting to eat", "nausea" and so on. Therefore, bupleurum decoctions can also be used for digestive diseases. Chang Ruidong [11] treated children mesenteric lymphaditis with Xiaochaihu decoction as the main prescription. The results showed that compared with Western medicine control group, the total effective rate of the observation group was higher, the symptom remission time was shorter, and the incidence of adverse reactions was lower ($P < 0.05$). Chinese medicine treatment is not only effective, but also safer than western medicine treatment, and can avoid the drug resistance and toxic side effects of Western medicine treatment, which is of great significance to improve the symptoms and compliance of children [12]. Hou Chunguang [13] with big bupleurum decoction as the main prescription to treat children cold (gastrointestinal type) is Shaoyang Yang Ming disease, with big bupleurum decoction and solution Shaoyang, through the Li Shi, the effect is exact. Wang Xiufang's [14] research found that Chaihu Guizhi decoction combined with Western medicine in the treatment of pediatric gastroenteritis not only can improve the effect, but also shorten the duration of clinical symptom relief. Li Weini [15] that parotid gland is located in the foot Shaoyang gallbladder line through the place, if the foreign evil invasion Shaoyang, resulting in Shaoyang channel qi is not smooth, unfavorable, internal and external disharmony and disease, so with small Chaihu decoction dregs three jiao, regulate up and down, Xuanchang inside and outside, harmonizing qi, and achieved good effect.

2.3 Nervous System

Children physiologically have the characteristics of heart, liver excess, spleen often insufficient, kidney often deficient. If the loss of care, panic, emotional disorders, resulting in zang-fu Yin and Yang imbalance, Qi-blood-body fluid disorder, deficiency and accumulation of mixed disease. Bupleurum decoctions can regulate the cardinal system, comb the qi mechanism, harmonize the Yin and Yang of zang-fu organs and the qi, blood and body fluid. So bupleurum decoctions can be used for nervous system diseases. Yang Lizhen et al. [16] used Xiaochaihu decoction to treat 45 cases of pediatric epilepsy, after treatment for 1-6 months, the total effective rate of 93.6%, the curative effect is exact. Li Yanning [17] thinks that children's angioneurotic headache is too little disease, Shaoyang channel qi imstuffy, with Chaihu Guizhi decoction as the main prescription, with the external and internal double solution, turning Shaoyang Qi machine, achieved better effect. Yuan Shaogang et al. [18] compared the treatment of 40 cases of pediatric acute facial neuritis with Chaihu Guizhi Decoction combined with acupuncture and

Western medicine. After 4 consecutive weeks of treatment, the total effective rate of the two groups was 100%, and the recovery rate of the Chinese medicine group was 45.00%, which was higher than 22.5% of the control group ($P < 0.05$). Zhang Baoqing [19] believes that the traditional Chinese medicine disease of children's tic disorder is more heart, spleen, liver, the pathogenesis lies in the disorder of Qi, wind evil, or phlegm, or dampness, or blood stasis, or deficiency and other pathologic factors, into a mixture of deficiency and excess, cold and heat mixed image, clinical treatment commonly used Chai Hu Guizhu ginger decoction, to put out the wind and stop spasm as the treatment principle, At the same time, the treatment of phlegm, dispelling dampness, promoting blood circulation, tonifying deficiency and so on, combined with cold and heat, the same treatment of deficiency and substance, specimen consideration. Li Ning [20] divided 60 cases of children with multiple TIC syndrome into two groups, the control group was treated with Tiapride tablets, oral administration, the initial dose was 50 ~ 100mg/ time, 2 ~ 3 times/day, with the extension of treatment time to increase the therapeutic dose, but not more than 600mg/ day, and then with the improvement of patients' symptoms, the appropriate reduction was controlled in 150 ~ 300mg/ day. The experimental group was given chaihu and keel oyster decoction, 2ml/kg/ time, 2 times/day, after continuous treatment for 8 weeks in both groups, the clinical effective rate of the experimental group (83.33%) was significantly higher than that of the control group (70.00%), and the difference between groups was statistically significant. After treatment, the total tic score of both groups decreased significantly, but the improvement of experimental group was more significant ($P < 0.05$).

2.4 Other Systems

Fu Changge [21] believes that treating water first to treat qi, children acute nephritis with hematuria, proteinuria, edema and other main clinical manifestations, mostly due to the gasification of the three jiao disorders, water and liquid do not melt, the upper jiao is not general Xuan Fu dense, sweat does not leak; Middle coke does not flow water wet shutdown; Lower jiao impenetrability, water can not penetrate into the bladder, overflow to the skin and swollen, so small bupleurum decoction to reduce the conciliatory Shaoyang, adjust the three jiao qi to treat 34 cases of acute nephritis in children, the complete cure rate of traditional Chinese medicine reached 82.3%. Diao Juanjuan [22] believes that children with abdominal anaphylactoid purpura dampness-heat type due to dampness-heat accumulation leads to liver and spleen disorders, qi and blood disharmony, broken blood spillage, clinical causes abdominal pain, vomiting, blood and other gastrointestinal symptoms, the treatment principle is to regulate the liver and spleen, reconcile qi and blood, remove dampness-heat, with Da Chaihu decoction to treat children with abdominal anaphylactoid purpura dampness-heat type. By reconciling Shaoyang, harmonizing liver and spleen, expelling heat and removing blood stasis, it can quickly relieve the symptoms of abdominal pain and blood stool in children, and obtain satisfactory curative effect. Li Lifu et al. [23] divided 60 cases of adolescent children with cervical spondylosis into two groups: 30 cases in the treatment group were treated with Chaihu Guidhi decoction supplemented with massage treatment, and 30 cases in the control group

were treated with Jifukang granules supplemented with massage treatment. After 2 weeks of treatment, the total effective rate of the treatment group was 93.3%, and the total effective rate of the control group was 63.3% ($P < 0.05$). Zhang Baoqing [10] treated infectious mononucleosis with Chaihu Guigui stem-Jiang Decoction to clear heat and detoxification, to regulate cold and heat, and to clear pus and dissolve the nodules. Huang Shunxiang [24] believes that children's frequent urination syndrome belongs to the category of traditional Chinese medicine. When children are frightened or typhoid fever is mistakenly caused, the evil Shaoyang is easy to cause the disorder of qi, the qi of the external and internal three jiao is not good, and the bladder is opened and closed infrequently resulting in frequent urination. Therefore, Chaihu and Kegou Oyster Decoction is used as the main prescription to conciliate Shaoyang, regulate the qi of the three jiao, and replenish qi and strengthen the kidney to treat 30 cases of children's frequent urination syndrome. There were 3 ineffective cases, the cure rate was 80%, the total effective rate was 90%, and the clinical effect was obvious.

3. Discuss

Shaoyang is half the surface and half the inside, it is the cardinal that the human qi machine rises and falls in and out, and it is the path of evil qi transmission; The liver and gallbladder are combined to the outside, the liver and gallbladder have a division, then the cardinal operates as usual, the qi machine can rise and fall freely, then the viscera function is normal. Children's physique is pure Yang, vigorous, rapid growth, like the rising Yang, which is consistent with the nature of Shaoyang. When the external evil encroaches on the human body, the sun first competes with the evil spirit, if the positive qi is abundant, it can drive the evil spirit out, but if the positive qi is insufficient, the evil spirit can enter from the surface. Children delicate organs, lungs are often insufficient, more prone to disease than adults, and easy to change, so once children feel evil, it is easy to enter from the surface, from the sun's surface transmission at least Yangzhishu and Yangming, resulting in the formation of the same disease, deficiency and other complex pathological state. Xiaobupleurum decoction and its related prescriptions, which took bupleurum as the royal medicine, were founded by Zhong Jing on the theory of Shaoyang as the pivot. The Shaoyang constitution of children (including pure Yang body, young Yin and young Yang body) accords with the characteristics of syndrome differentiation and treatment of bupleurum decoctions. To sum up, bupleurum decoctions is a basic pediatric prescription with exact curative effect, and it can be used for a variety of diseases of pediatric multi-system after dialectical compatibility. However, when treating diseases with bupleurum decoctions, it is necessary to follow the theory of Zhong Jing's Treatise on Febrile Diseases and satisfy the basic principle of the combination of addition and subtraction based on syndrome differentiation in order to obtain satisfactory results.

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