Bronchopneumonia of Advances in Chinese Medicine

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Keywords: Bronchopneumonia; external treatment; Chinese medicine

Abstract: Through reviewing the literature, it is found that the main TCM treatments for bronchopneumonia include TCM treatment, acupoint patch treatment, TCM directional drug delivery treatment, pulsed microwave therapy, pediatric massage therapy, etc. TCM comprehensively regulates the children's physique and strengthens the positive and dispels the evils; acupoint patch treatment, TCM directional drug delivery treatment, and pulsed microwave therapy are effective in improving the children's cough, coughing up sputum, and promoting absorption of the rosary; pediatric massage promotes recovery of bronchopneumonia by improving the spleen and stomach functions; and pediatric massage promotes recovery of bronchopneumonia by improving spleen and stomach to promote the recovery of bronchopneumonia. Pediatric Tuina promotes the recovery of bronchopneumonia by improving the spleen and stomach to promote the recovery of bronchopneumonia. Pediatric Tuina promotes the recovery of bronchopneumonia by improving the spleen and stomach to promote the recovery of bronchopneumonia. Pediatric Tuina promotes the recovery of bronchopneumonia by improving the spleen and stomach to promote the recovery of bronchopneumonia. Pediatric Tuina promotes the recovery of bronchopneumonia by improving the spleen and stomach to promote the recovery of bronchopneumonia.

1. Introduction

According to the World Health Organization (WHO), pneumonia caused 920,000 deaths among children under 5 years of age in 2016, 98% of which were from developing countries. Pneumonia is one of the leading causes of under-five deaths in the country[1].Western medical treatment of bronchial pneumonia is based on symptomatic treatment, mostly choosing antibiotics and even hormones, which are widely trusted by parents for their fast efficacy and ease of use, while their inevitable side effects are also getting more and more attention from young parents, thus effective Chinese medicine treatments are imminent. Pneumonia Chinese medicine disease name "pneumonia cough", pediatric pneumonia cough is to heat, cough, phlegm, wheezing, incitement for the main clinical manifestations of the lung disease[2].The main clinical manifestations are heat, cough, phlegm, wheezing, and incitement. By reviewing the literature of the past 20 years, the following is a review of the treatment of pediatric bronchopneumonia by traditional Chinese medicine (TCM).

2. TCM treatment method

2.1 Chinese medicine

Chinese medicine is guided by the basic theories of TCM, and on the basis of TCM dialectic treatment, different TCM prescriptions are given to the children according to their tongues, pulses, and symptoms, so as to utilize the different biases of TCM to cure the diseases. Liu Aijuan et al [3]

studied 90 cases of bronchopneumonia and found that the effect of the treatment group of Ma Xing Shi Gan Tang was significantly better than that of the conventional Western medicine treatment group. Xie Weifeng[4] 76 cases of bronchial pneumonia collected were studied and analyzed, and it was found that the clinical effect of applying Stop Coughing Powder was higher than that of conventional treatment. Lin Junsheng[5] it was found that the treatment effect of applying Ge Gen Scutellariae Lian Tang Plus Flavor was significantly better than that of the control group.

2.2 Acupuncture Point Patch

The Lu Jin et al[6-7] randomly divided 100 cases of children with pneumonia and wheezing cough with phlegm-heat-embedded lung evidence into 50 cases in the control group and 50 cases in the observation group, the control group was treated with conventional western medicines, and the observation group was treated with acupoints on the basis of conventional western medicines, and the study found that the effective rate of the observation group was 100%, which was significantly better than that of the control group, and the disappearance of lung rales, cough disappearance, and other clinical symptoms of the observation group was shorter than that of the control group, and the difference was statistically significant (p<). The difference was statistically significant (P<0.05). Shu Huilin et al[8] the children diagnosed with pediatric bronchopneumonia were randomly divided into control group and experimental group of 30 cases each, the control group was given regular symptomatic supportive treatment, and the experimental group was given acupoint plaster treatment based on the regular treatment, and the acupoint plasters were selected from the traditional Chinese medicines of resolving phlegm and expelling phlegm, warming the middle and dispersing the cold, such as Gan Sui, Cinnamon, Cumin, and so on, and they were put onto the points of the lungs of the children, thus playing the role of warming the lungs and resolving phlegm, and the researchers found the effect of the research was very significant. On the 6th day after the treatment, the effective rate of the experimental group was 93.24%, which was significantly higher than that of the control group, and the difference was statistically significant (P<0.05). Moreover, the hospitalization time, the temperature recovery time, and the time of cough disappearance of the experimental group were shorter than that of the control group, and the difference was statistically significant (P<0.05).

2.3 TCM directional penetration

Orientation transdermal medicine refers to the guidance of the transdermal medicine instrument, the drug through the electrical stimulation directly to the corresponding acupoints or foci, which can make the active ingredients of the drug more direct, more in-depth directly to the foci, and avoid the stimulation of the drug on the stomach and intestines[9]. This kind of therapy not only plays the role of drugs but also avoids the shortcomings of children not cooperating with medication, which is easier for parents to accept. [10]. It is easier for parents to accept. Li Haiyan [11] Sixty-eight children diagnosed with pediatric bronchopneumonia were randomly divided into a control group and an observation group. The control group was treated with conventional therapy, while the observation group was treated with Chinese medicine directional transdermal therapy, and it was found that the effective rate of the observation group was significantly higher than that of the control group, and the level of inflammatory factor of the observation group was significantly lower than that of the control group. Liu Wenxia et al[12]200 children diagnosed with bronchopneumonia were randomly divided into 100 cases in the observation group and 100 cases in the control group, the control group was treated with conventional western medical treatment, and the observation group was treated with TCM directional transdermal therapy on the basis of conventional western medical treatment, and it was found that the total effective rate of the observation group was 97.00%, which was higher than that of the control group, and the children in the observation group had a significantly shorter average hospital stay than the control group (P<0.05), and the average hospital stay was significantly shorter than the control group (P<0.05), and the total effective rate was significantly shorter than that of the control group. The total effective rate of the observation group was 97.00%, which was higher than that of the control group.

2.4 Pulsed Microwave Therapy

Drugs are promoted to penetrate and be absorbed by using pulsed methods, such as ionic introduction, ultrasound introduction, electromagnetic introduction and chemical pro-osmotic agents and other adjunctive therapies [13]. Microwave is a high-frequency electromagnetic wave that can penetrate the tissue 3-7cm[14]. The microwave is a high-frequency electromagnetic wave that can penetrate the tissue 3-7cm. For example, in ultrasonic introduction therapy, the drug passes through the skin and enters the soft tissue under the micro-oscillation of ultrasonic waves, so that the drug reaches the lesion directly and promotes the discharge and absorption of sputum in lung tissue[15]. The medicine can directly reach the lesions and promote the discharge and absorption of phlegm from the lung tissue. Bai Lanzhi[16] 104 children diagnosed with bronchopneumonia were treated with microwave therapy group 52 cases and control group 52 cases, microwave therapy group added microwave therapy on the basis of conventional western medicine treatment, control group was treated with conventional western medicine symptomatic supportive therapy, the research results found that the effective rate of microwave group was 94.12%, which was higher than 77.65% of the control group, and there was a significant difference in therapeutic effect of the 2 groups (P<0.05). Wang Yujing et al[17] collected 265 cases of children diagnosed with bronchopneumonia and randomly divided them into 135 cases in observation group and 130 cases in control group, the observation group added pulse microwave treatment on the basis of conventional treatment; the control group used conventional treatment, and the results found that the time for the fever to subside, the time for the disappearance of lung rales, and the time for the disappearance of cough in the observation group were all shorter than that in the control group (P<0.01), and the total effective rate was 85.9% in the observation group and 72.3% in the control group, and the total effective rate was 85.9% in the observation group and 72.3% in the control group. The total effective rate of the observation group was 85.9%, and that of the control group was 72.3%, and the difference between the two groups was significant (P<0.05).

2.5 Pediatric Tui Na

Pediatric massage is guided by the theoretical system of traditional Chinese medicine, through the stimulation of the corresponding acupuncture points, skin, to achieve the purpose of adjusting yin and yang, preventing and curing diseases[18].Pediatric Tui Na is an easy-to-learn, easy-to-operate therapy. Pediatric Tuina is a simple, easy-to-learn and highly operable therapy that has been widely used in the prevention and treatment of pediatric digestive and respiratory diseases[19]-[21]. The treatment process not only works directly on the children, but also increases the response rate of the children and the trust of the parents through psychological counseling and health education.[22]. The treatment process not only has a direct effect on children, but also increases the response rate of children and parents' trust through psychological counseling and health education. [23] 200 cases of children diagnosed with bronchopneumonia were randomly divided into 100 cases each in the control group and the observation group. The children in the control group were treated with comfort therapy on the basis of conventional treatment, and the children in the observation group had lower scores of cough symptoms than those in the control group; the total hospitalization costs and frequency of nebulization use in the observation group were lower than those in the control group, and the parents'

satisfaction was higher.

3. Conclusions

Bronchopneumonia as a more common clinical condition, has an increasingly high incidence rate[24-26].Western medical treatment is mainly symptomatic treatment, mostly choosing antibiotics or even hormones, whose inevitable side effects are getting more and more attention from parents. Combination of Chinese and Western medicine can not only give play to the anti-inflammatory advantages of Western medicine, but also give play to the advantages of the motherland's medicine, which is safe, easy for parents to end, and has reliable efficacy, therefore, the combination of Chinese and Western medicine can speed up the recovery of the affected children and improve the treatment of the affected children's life.

References

[1] Liu Jinrong, Zhao Chengsong, Zhao Shunying. Interpretation of the Diagnostic and Treatment Guidelines for Community-Acquired Pneumonia in Children (2019 Edition)[J]. Chinese Journal of Practical Pediatrics, 2020, 35(03): 185-187. DOI:10. 19538/j. ek2020030604.

[2] Tantawy AA, Sallam TH, Ibrahim DM, et al. Pathogenesis and Prognosis of Neutropenia in Infants and Children Admitted in a University Children Hospital in Egypt [J]. Pediatr Hematol Oncol, 2013, 30 (1): 51 - 59. DOI: 10. 3109 /08880018. 2012. 743199.

[3] Liu Aijuan, Li Yueling. Effect of combined treatment of pediatric bronchopneumonia with internal and external therapy of traditional Chinese medicine and its effect on patients' serum inflammatory factor[J]. Journal of Jiangxi University of Traditional Chinese Medicine, 2021, 33(03):64-66.

[4] Xie Weifeng. Clinical efficacy of Chinese medicine stopping cough powder in treating pediatric bronchopneumonia[J]. Inner Mongolia Traditional Chinese Medicine, 2019, 38(09):26-27. DOI:10. 16040/j. cnki. cn15-1101. 2019. 09. 016.

[5] Lin Junsheng. Analyzing the clinical efficacy and characteristics of Ge Gen Baicalin Lian Tang plus flavor in treating pediatric bronchopneumonia[J]. World Digest of Recent Medical Information, 2017, 17(57):10-11. DOI:10. 19613/j. cnki. 1671-3141. 2017. 57. 005.

[6] Liu Mengjuan, Wang Jiajia. Application of Chinese time medicine in pulmonary diseases[J/OL]. World TCM:1-12[2023-08-10]. http://kns. cnki. j. yyttgd. top/kcms/detail/11. 5529. R. 20230727. 1522. 007. html.

[7] Lu Jin, Zhou Ling. Observation on clinical efficacy of traditional Chinese medicine acupoint application in the treatment of pediatric bronchopneumonia[J]. Journal of Changzhi Medical College, 2022, 36(02):123-126.

[8] Shu Huilin, Liu Zhiyu, Duan Li et al. Study on the treatment of pediatric bronchopneumonia by acupoint application of traditional Chinese medicine combined with western medicine[J]. Medical Food Therapy and Health, 2021, 19(03):39-40.

[9] Lin Yuqing, Ai Bin, Huang Lianming. Bibliometric visualization and analysis of the current status and trend of research on directional transdermal therapy of traditional Chinese medicine[J]. China Medical Journal, 2023, 25(02): 163-168.

[10] Yu Dusheng, Xu Xiaoli, Ouyang Huogui, et al. Clinical observation on the treatment of pediatric diarrhea by traditional Chinese medicine directional drug transmission therapeutic instrument and lactobacillus capsule[J]. Guangming Traditional Chinese Medicine, 2018, 33 (11): 1517-1519.

[11] Li Haiyan. Observation on the effect of traditional Chinese medicine directional dialysis therapy in treating pediatric bronchopneumonia[J]. Baiqiu'en Medical Journal, 2019, 17(06):601-602. DOI:10. 16485/j. issn. 2095-7858. 2019. 06. 039.

[12] Liu Wenxia, Liang Shuiqin, Lian Huiyan et al. Analysis of the effectiveness and safety of directional drug delivery therapy of traditional Chinese medicine in the treatment of pediatric pneumonia[J]. Drug Evaluation, 2020, 17(02):67-68.

[13] Qvist MH, Hoeck U, Kreil gaard B, et al. Release of che Mical permeation enhancers from drug in adhesive transdermal patches. int J Pharm, 2002, 231(2): 253

[14] Hu QM, Zhu YJ, Ma JL, et al. Microwave treatment of capillary bronchitis patients 62 cases of efficacy observation . Chinese Journal of Physical Medicine and Rehabilitation, 2004, 26 (8): 471-472.

[15] Peng Lingling. Clinical observation on pulse microwave treatment of bronchopneumonia in children[J]. China Practical Medicine, 2011, 6(31):29-31. DOI:10. 14163/j. cnki. 11-5547/r. 2011. 31. 184.

[16] Bai Lanzhi. Clinical observation of 104 cases of pediatric bronchopneumonia treated with microwave adjuvant[J]. Chinese and foreign medical treatment, 2011, 30(18):73. DOI:10. 16662/j. cnki. 1674-0742. 2011. 18. 135.

[17] Wang Yujing, Du Kan, Xu Shiman. Observation on the therapeutic effect of pulsed microwave combined with transcutaneous introduction of traditional Chinese medicine in the adjuvant treatment of pneumonia in children[J]. People's Army Medicine, 2010, 53(05):366-367.

[18] Li Qi, Tian Fuling, Cui Jianmei. Effect of massage on the change of pediatric asthma body type[J]. China Maternal and Child Health Care, 2014, 29(8):1206-1208.

[19] Chen L, Jiang HM. Research progress of pediatric massage for cough and asthma[J]. Journal of Guangxi University of Traditional Chinese Medicine, 2014, 17(1):104-106.

[20] Gong Ke, Li Fei, Wang Lezhou, Et al. Clinical effect of pediatric massage in treating pediatric exogenous fever[J]. Chinese Contemporary Medicine, 2018, 25(32):88-90.

[21] Yang Juan, Hu Yang. Clinical study of pediatric tuina with three-bean drink in treating pediatric fever[J]. Chinese Contemporary Medicine, 2019, 26(29):85-87.

[22] Liang Ruifen, Liang Fenghao. Clinical Nursing Observations on Pediatric Tui Na with Acupuncture Point Patching in the Treatment of Pediatric Diarrhea[J]. China Contemporary Medicine, 2018, 25(17):194-196.

[23] Wang Qian, Wang Li, Liu Yanchun. Application effect of pediatric massage therapy in pediatric bronchopneumonia [J]. China Contemporary Medicine, 2022, 29(20):63-65.

[24] Hao Yanming, Wang Lin. Progress of clinical research on assisted treatment of pediatric bronchopneumonia with external treatment of traditional Chinese medicine[J]. Journal of Chinese Pediatrics, 2023, 19(01):95-98. DOI: 10. 16840/j. issn1673-4297. 2023. 01. 25.

[25] Li Dongmei, Dai Zhu, Yang Zhixian, et al. Analysis of the current situation of pediatric massage [J]. Journal of Yunnan College of Traditional Chinese Medicine, 2013, 36(4): 50-51.

[26] Long Fei. Progress of clinical diagnosis and treatment of pediatric bronchopneumonia[J]. Journal of Clinical Rational Medication, 2019, 12(01):180-181. DOI:10. 15887/j. cnki. 13-1389/r. 2019. 01. 101.