

Suhuang Zhike capsule combined with Montelukast, sodium treat 30 cases clinical observation of children cough variant asthma

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Abstract: Objective To observe the therapeutic effect of Suhuang Zhike Capsule [capsule of Zisuye (Folium Perillae) and Mahuang (Herba Ephedrae) for cough] for children's cough variant asthma. **Methods** 62 children (6-14 years old) with CVA were randomized into treatment group and control group with 31 cases in each. The treatment group was given Montelukast Sodium tablet and Suhuang Zhike Capsule complete, and 30 cases were completed. The control group was given Montelukast Sodium tablet and starch capsule. The treatment course lasted for 14 days. The total effective rates and the relief rates of single symptom, such as cough, pharyngeal itching, rapid breathing and expectoration were observed in both groups after the treatment. **Results** The total effect rate of the treatment group and the control group was 90% and 64.52% respectively. The differences between groups were statistically significant ($P < 0.05$). The relief rates of single symptom in the treatment group were superior to those in the control group ($P < 0.05$). **Conclusion** Suhuang zhike capsule is effective for children's CVA and could be applied as a clinical medicine,

key words: Suhuang Zhike capsule; Children's cough variant asthma; Clinical observation

Cough variant asthma (CVA)^[1] is a special type of asthma, cough is the only or the main clinical manifestations, no obvious wheezing and shortness of breath, but there is hyperresponsiveness (BHR). The treatment of Suhuang Zhike capsule has great effect on adult cough variant asthma, which great effect is related to reducing BHR and improving bronchial sensitive state^[2]. Till now, there is no objective basis provided for treating children CVA, therefore, this study is intended to observe clinical curative effect of Suhuang Zhike capsules treating children CVA.

1. Materials and methods

1.1 Diagnostic criteria

1.1.1 Modern medicine^[3]: (1). Coughing lasts at least 4 weeks and seriously in the early morning or at night, mainly performs a dry cough; (2) There is no signs of infection or antibiotic treatment is invalid for a long time; (3.) Anti-asthmatic drugs are effective on Diagnostic treatment; (4) Ruling out other causes of chronic cough; (5) Bronchial provocation test is positive and (or) the daily variation rate of PEF (continuous monitoring for 1 ~ 2 weeks) is more than 20% or higher; (6.) Individual or level 1 or 2 relatives atopic have disease history, or allergen test positive.

Item 1 ~ 4 are basic conditions for diagnosis.

1.1.2 TCM diagnostic criteria: Refer to asthma diagnostic criteria in Pediatrics of traditional Chinese medicine^[4] as the asthma diagnostic of Children CVA: cough, sputum less or no phlegm and hard to cough up, which apparently at night or in the morning.

1.2 Inclusion and Exclusion criteria

1.2.1 Inclusion criteria: (1) Accord with the modern medicine and TCM diagnostic criteria of children CVA; (2) Ages between 6 and 14 years old; (3) Parents or other statutory guardians agree.

1.2.2 Exclusion criteria: (1) Fever, pharyngitis; (2) Chronic obstructive pulmonary disease, lung cancer, tuberculosis etc.; (3) High blood pressure, heart disease and some serious primary diseases; (4) Having taken some other drugs for research or taken some relevant Chinese medicine for treating; (5) The allergies to this known Composition of TCM.

1.2.3 Cases of loss or excluding standard: Having quit or did not complete the whole treatment who is affected the efficacy or safety decision as a loss. Included cases did not meet the inclusion criteria or failed to follow the drug testing scheme should be excluded.

1.3 General information: All the 62 cases came from Pediatric clinics, which belong to the second hospital of Heilongjiang University of Chinese medicine, Feb 2011 to Jul 2011. 62 cases were divided into two groups, each 31 cases. 31 cases in the treatment group were adopted with foundation treatment and cooperate with Suhuang Zhike capsule, and 30 cases completed. 31 cases in the control group were adopted with foundation treatment and cooperate with starch capsule, and 31 cases completed. The treatment course lasted for 14 days. There were 18 boys and 12 girls whose average age was (9.63 ± 2.16) years old and the average course of the disease was (2.13 ± 0.82) months in the treatment group, and 16 boys and 15 girls whose average age was (11.20 ± 3.77) years old and the average course of the disease was (2.19 ± 0.79) months in the control group.

2. Methods

2.1 Treatment

Foundation treatment: Given Montelukast Sodium tablet (Trade name: Singulair, Hangzhou MSD pharmaceutical co., LTD., approved by J20070070. 5 mg each). 5 mg/t/d.

Treatment group: the foundation treatment combined with Suhuang Zhike Capsule [The Yangtze river pharmaceutical group, Beijing Haiyan pharmaceutical co., LTD., approved by Z20103075. Composition: Ephedra, Perilla frutescens (L and S), Eriobotrya japonica, Pheretima aspergillum, Cryptotympana pustulata Fabricius, Peucedanum praeruptorum Dunn, Schisandra chinensis (Turcz) Baill, Arctium lappa L. 0.45 g each, equivalent to 4.44 g of herbs.] Take method: 6-9 years old, 2 pills each time and 3 times a day, 9-14 years old, 3 pills each time, and 3 times a day.

Control group: the foundation treatment combined with starch capsule (The second hospital pharmaceutical factory in Heilongjiang University of traditional Chinese medicine provided experiment preparations. Main composition: starch. 0.45 g each.)

Two groups both lasted for 14 days. Ban to take other cough medicine during the treatment.

2.2 Observation indexes and methods

2.2.1 Safety testing: including general physical examination and adverse reactions during the period of treatment, blood routine, urine routine, stool routine, liver (ALT), kidney (Cr, BUN).

2.2.2 Efficacy indicators: make a record related signs and symptoms before and after treatment, including cough, throat itching, wheeze, cough up phlegm.

2.3 Curative effect judgement standard

CVA curative effect judgment standard^[6]: Clinical cure: completely relieve cough symptoms, primary symptom score of 0; Obvious effective: primary symptom score degraded two levels at the same time; Effective: primary symptom score degraded one level at the same time, or a primary symptom degraded two levels, a primary symptom degraded one level; Invalid: cough relief was not obvious or cough more seriously.

2.4 Statistical methods

Using SPSS16.0 statistical software for statistical analysis. Measurement data using t test; Count data using χ^2 test and Fisher test.

3. Results

3.1 The two groups' comparison of cough curative effect

The total effective rate of the treatment group and the control group was 90% and 64.52% respectively. The differences between groups were statistically significant ($P < 0.05$). The relief rates of single symptom in the treatment group were superior to those in the control group ($P < 0.05$).

3.2 The curative effect comparison of single TCM symptoms

The rates of single TCM of two groups were back to normal as table 1, showed that the treatment group were better than the control group ($P < 0.05$).

Table 1 The rates of single TCM symptoms were back to normal after treatment

Group	Cases	Cough	Throat itching	Rapid breathing	Expectoration
Treatment	30	53.33(16/30)	37.04(10/27)	78.26(18/23)	70.83(17/24)
Control	31	22.58(7/31)	19.23(5/26)	52.38(11/21)	53.85(14/26)

3.3 Safety analysis

General physical examination showed that the blood routine, stool routine, urine routine, liver and kidney were all normal in these two groups.

4. Discussion

CVA is a special type of asthma. Children with CVA who was not controlled well would become CA. Children with CVA should be treated earlier which could reduce the burden of family and improved the quality of patients' life.

The treatment principle of CVA was the same with asthma^[5] which was taking ICS or Montelukast Sodium tablet. Both of these had a quick effect, but a rapid recurrence after stopped taking or dose reduction. The TCM treatment principle was to keep the balance of Yin and Yang. TCM could reduce the symptoms gradually, shorten the timing, reduce the number of disease recurrence and drug dependence, the prognosis is also good.

In this study, the results showed that Suhuang Zhike capsule had a good effect on treating children CVA, which was convenient for children to take and compliance was good, could be applied as a clinical medicine.

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Clinical observation on 60 cases of fasciitis of back muscles with the electroacupuncture by the point-through-point of back method

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[Abstract] Objective: To observe therapeutic effect of fasciitis of back muscles with the electroacupuncture by the point-through-point of back method in the treatment. **Methods:** 60 cases of fasciitis of back muscles were randomly divided into two groups. The treatment group were treated with the electroacupuncture by the point-through-point of back method and the control group were treated with simple acupuncture. After treatment of 30 days, the therapeutic effect was assessed with visual analogue scales (VAS). **Results** The total effective rate was 96.7% in the treatment group and 76.7% in the control group. The treatment group in improvement pain was better than the control group and with scores significantly decreased ($P < 0.01$). **Conclusion** the